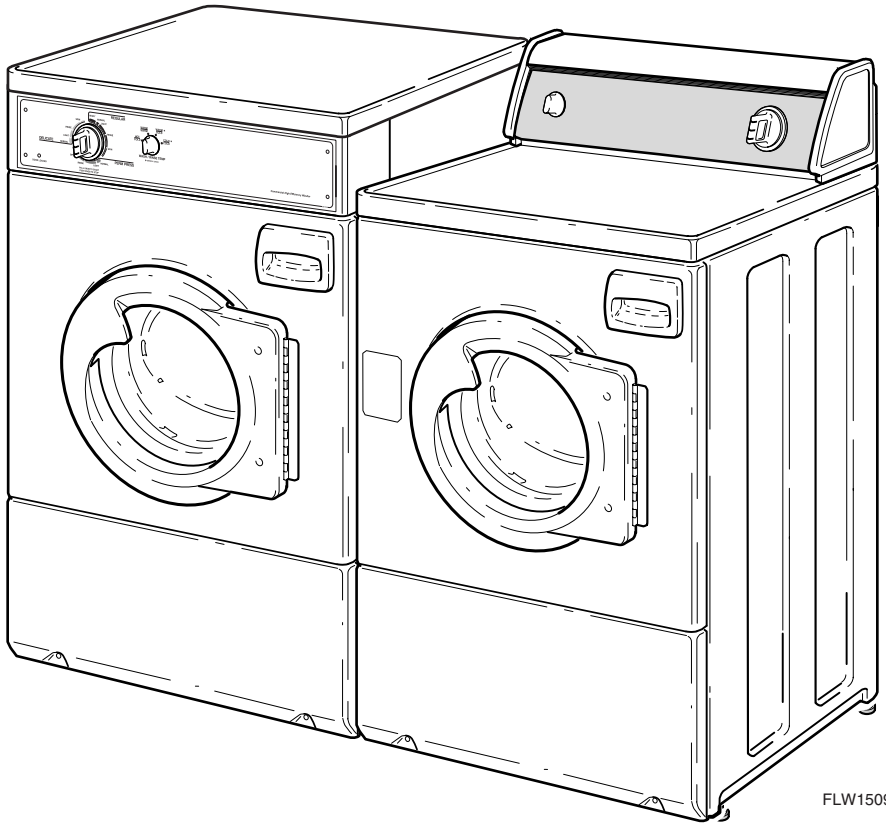
Homestyle Frontload Washers

Service

Refer to Page 5 for Model Numbers



FLW1509C

Alliance Laundry Systems

www.comlaundry.com

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Notes

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Section 1
Safety Information

Throughout this manual and on machine decals, you will find precautionary statements ("CAUTION," "WARNING," and "DANGER") followed by specific instructions. These precautions are intended for the personal safety of the operator, user, servicer and those maintaining the machine.

⚠ DANGER

Danger indicates the presence of a hazard that **will** cause **severe** personal injury, death or substantial property damage if the danger is ignored.

⚠ WARNING

Warning indicates the presence of a hazard that **can** cause **severe** personal injury, death or substantial property damage if the warning is ignored.

⚠ CAUTION

Caution indicates the presence of a hazard that **will** or **can** cause **minor** personal injury or property damage if the caution is ignored.

Additional precautionary statements ("IMPORTANT" and "NOTE") are followed by specific instructions.

IMPORTANT

The word "IMPORTANT" is used to inform the reader of specific procedures where minor machine damage will occur if the procedure is not followed.

NOTE

The word "NOTE" is used to communicate installation, operation, maintenance or servicing information that is important but not hazard related.

In the interest of safety, some general precautions relating to the operation of this machine follow.

WARNING

- **Failure to install, maintain and/or operate this product according to the manufacturer's instructions may result in conditions which can produce serious injury, death and/or property damage.**
- **Do not repair or replace any part of the product or attempt any servicing unless specifically recommended or published in this Service Manual and unless you understand and have the skills to carry out the servicing.**
- **Whenever ground wires are removed during servicing, these ground wires must be reconnected to ensure that the product is properly grounded and to reduce the risk of fire, electric shock, serious injury or death.**

W006R2

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WARNING

To reduce the risk of electric shock, fire, explosion, serious injury or death:

- **Disconnect electric power to the washer before servicing.**
- **Never start the washer with any guards/panels removed.**
- **Whenever ground wires are removed during servicing, these ground wires must be reconnected to ensure that the washer is properly grounded.**

W003

WARNING

Repairs that are made to your products by unqualified persons can result in hazards due to improper assembly or adjustments subjecting you or the inexperienced person making such repairs to the risk of serious injury, electrical shock or death.

W007

WARNING

If you or an unqualified person perform service on your product, you must assume the responsibility for any personal injury or property damage which may result. The manufacturer will not be responsible for any injury or property damage arising from improper service and/or service procedures.

W008

NOTE: The WARNINGS and IMPORTANT INSTRUCTIONS appearing in this manual are not meant to cover all possible conditions and situations that may occur. Common sense, caution and care must be exercised when installing, maintaining or operating the washer.

Always contact your dealer, distributor, service agent or the manufacturer about any problems or conditions you do not understand.

Locating an Authorized Servicer

Alliance Laundry Systems is not responsible for personal injury or property damage resulting from improper service. Review all service information before beginning repairs.

Warranty service must be performed by an authorized technician, using authorized factory parts. If service is required after the warranty expires, Alliance Laundry Systems also recommends contacting an authorized technician and using authorized factory parts.

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Section 2
Introduction

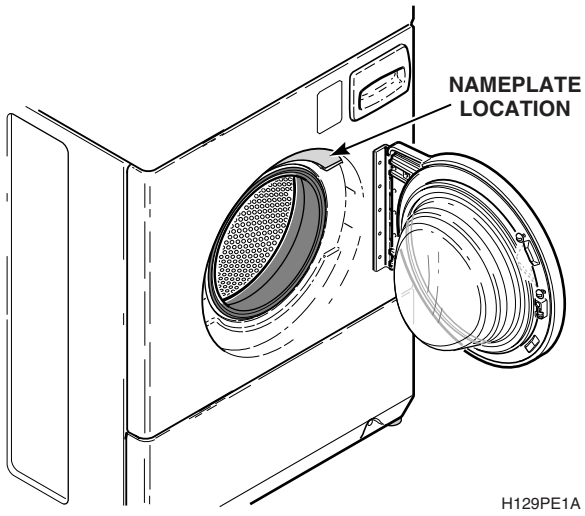
Customer Service

If literature or replacement parts are required, contact the source from whom the machine was purchased or contact Alliance Laundry Systems at (920) 748-3950 for the name and address of the nearest authorized parts distributor.

For technical assistance, call (920) 748-3121.

Nameplate Location

When calling or writing about your product, be sure to mention model and serial numbers. Model and serial numbers are located on nameplate(s) as shown.



Model Identification

Information in this manual is applicable to these washers.

FTS80A*H	LTS80A*E
FTU80A*H	LTS80A*H
FTZ80A*H	LTZ80A*H1102

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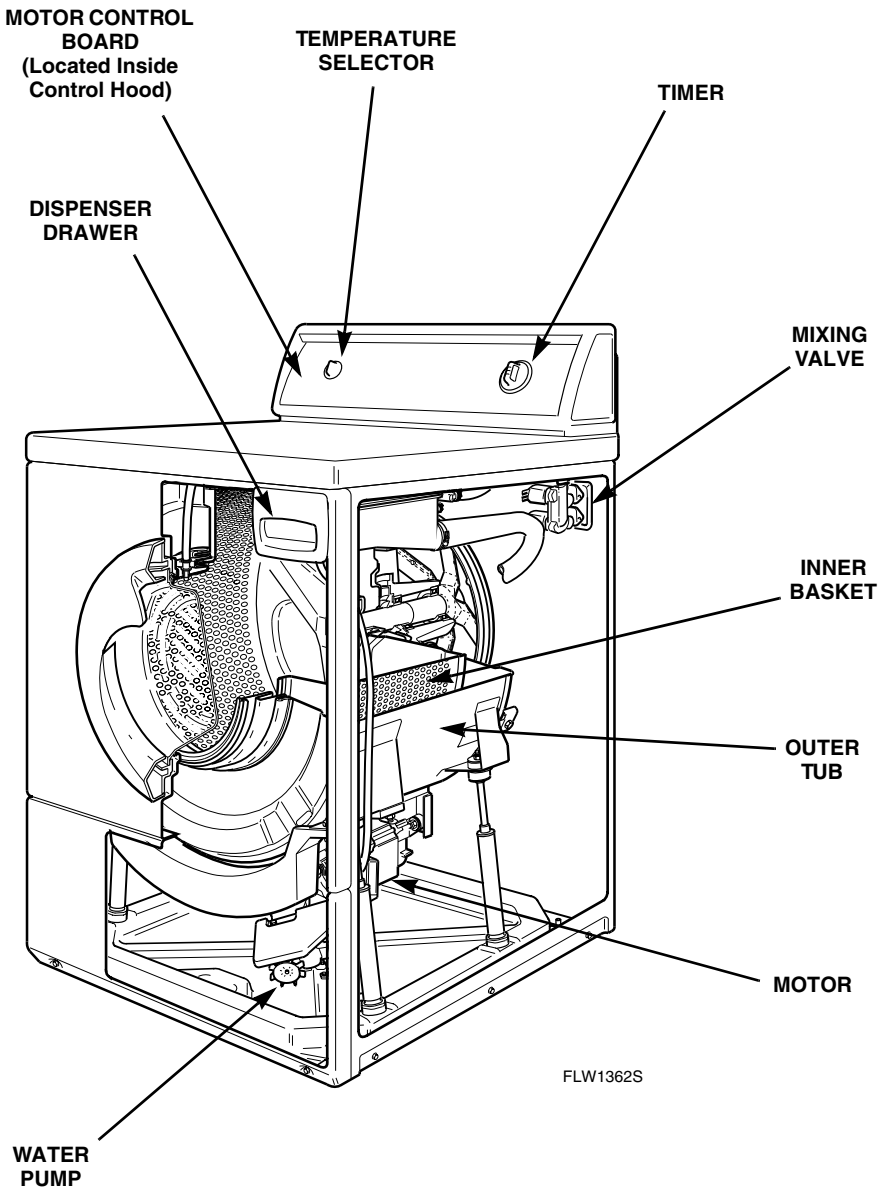
How Your Washer Works



REAR CONTROL MODELS

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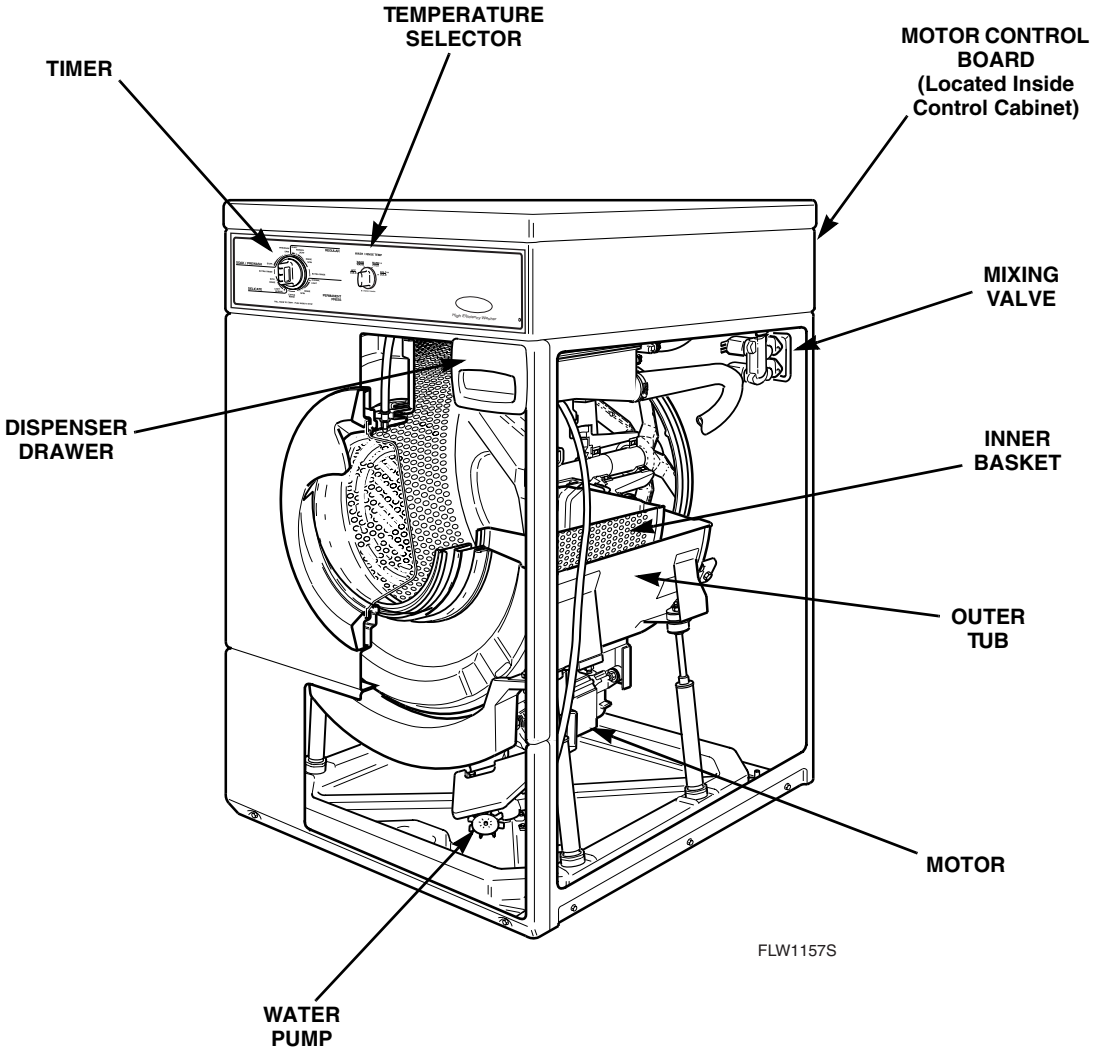

FRONT CONTROL MODELS

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General

This frontload washer provides some of the same principles of operation as the typical topload washers. It senses water level, it dispenses the desired laundry detergent, tumbles the clothes for good cleaning action, pumps the water out of the washer and spins the clothing for preparing for the dryer.

The difference in operation is primarily the rotational washing cycle that tumbles the clothes in a timer controlled clockwise, pause and then a counter-clockwise direction. This reversing cycled tumbling action provides a much more efficient washing process which requires less laundry detergent and less water.

The cycle begins by locking the loading door with a wash fill command from the timer. The water temperature is determined by the temperature selector.

While water fills the inner basket, a column of air is trapped in a pressure bulb and hose. The air pressure continues to increase as the inner basket fills with water until it is great enough to activate the pressure switch. The pressure switch then causes the wash fill to stop and starts the reversing rotational washing cycle.

The reversing rotational cycle tumbles the clothing in a clockwise direction for a period of 20 seconds, pauses for 9 seconds and then tumbles the clothing in a counterclockwise direction for ten seconds. This action continues until the completion of the wash cycle selected on the timer.

Upon completion of the wash cycle, the machine goes into a rinse cycle. The rinse cycle consists of a spin mode that removes the majority of the detergent water from the clothing and also activates the electric water pump which removes the wash water. Fresh temperature selected water is brought into the inner basket via the mixing valve, the pressure switch shuts off the water and then a rinse cycle starts. The rinse cycle consists of a tumble reversing action similar to the washing cycle for a pre-determined amount of time, a spin mode, and includes water being pumped out and fresh water being brought into the washer. Several of these rinse cycles will take place, based upon the operator timer wash type selection.

After all the rinse cycles have been completed, the washer goes into a 1059 rpm final spin cycle for 90 seconds to extract as much water as possible from the clothing, preparing them for the dryer. When this fast spin cycle is completed, the washer goes into a fluff tumble mode similar to agitate, only without water. Operation stops and the loading door interlock is deactivated allowing operator entry into the washer.

Technical

The basic operational controls of this washer consists of the motor control logic board, timer, pressure switch, temperature switch, D.C. motor and electric pump.

The principle of operation remains the same as other washing machines. The door locks and starts the timer. The timer starts the machine process by first having the electronic control activate the dual water inlet mixing valve which starts to fill the washer via the dispenser mixing valve. The water temperature is determined by the operator selected temperature switch position, which selects the hot, cold or both mixing valves. The second step is adding the detergent and other washing ingredients. This process continues until the air pressure, via the pressure bulb and hose, activates the pressure switch, which overrides the timer fill command.

The timer continues its rotational cycle, which then sends the command to the motor control board to start the timer rotator. The tumble rotating action is a specific wash cycle rotation, pause and then reverse rotation. This process continues for an operator's selected period of time.

The next command mode the timer signals to the motor control board is to start the rinse cycle. This cycle signals the electric pump to turn on and direct the wash water out of the washer. The motor control board then commands the motor to go into a faster spin cycle in an attempt to remove a reasonable amount of water out of the clothing. The spin cycle stops and then adds fresh rinse water into the washer via the inlet mixing valve and dispenser hose. After the pressure switch shuts off the water inlet mixing valve, the motor control board commands the motor to start the normal wash rotational, pause, reverse direction process for a timer controlled amount of time. This rinse cycle is completed twice.

The next portion of the wash cycle is the spin cycle. In this cycle the control board turns the electric pump on to remove the rinse water from the tub. The washer will spin at a distribution speed of 90 rpm until the pressure switch is satisfied as empty. The washer then goes to a 500 rpm spin for 30 seconds and returns to the 90 rpm distribution speed for another 30 seconds. This allows the motor control board to "sense" the out-of-balance condition of the load. This sequence is repeated any time the washer attempts to go to a spin speed. At this time the washer then goes into a final spin mode of 650 rpm for approximately 5 minutes and ramps up to 1059* rpm for the remaining 90 seconds.

*(For Regular and Rinse and Spin cycles only).

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Section 3
Washer Troubleshooting

WARNING

To reduce the risk of electric shock, fire, explosion, serious injury or death:
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- **Never start the washer with any guards/panels removed.**
- **Whenever ground wires are removed during servicing, these ground wires must be reconnected to ensure that the washer is properly grounded.**

W003

1. NO SPIN CONDITION – MODELS THROUGH SERIAL NO. 9811005968

A "no spin" condition could be the result of an open circuit in the wire harness or out-of-balance switch.

a. Check that the harness is still connected to the out-of-balance switch. The wiring diagram may show the out-of-balance switch as a normally open switch which is incorrect. The switch is a normally closed switch.
b. To test the electrical circuit, disconnect electrical power to the washer.
c. Remove the "H3" connector from the motor control board.
d. Use an Ohm meter and check the black/white to violet/white wires. Circuit should read closed, an open reading indicates a bad switch or wire harness problem.
e. Flex the harness at the plastic retainer and test the switch and if okay, the base wire harness has an open circuit and MUST be replaced.
f. After replacing the wire harness, tape the harness wires to the left front shock 1 ½ inches from top of shock. Refer to *Figure 1*.

IMPORTANT: Leave a minimum of 8 inches of slack between tape on shock and the plastic wire retainer on the out-of-balance switch mounting bracket. Refer to *Figure 1*.

2. TROUBLESHOOTING KNOCKING NOISE

If a frontload washer produces a noise similar to a knock on a door, it might be due to a flat spot on the belt. The knocking sound is made when the flat spot hits the pulley. The knocking may occur during a pulse spin and fade after reaching a higher RPM.

To correct this condition, replace the washer belt.

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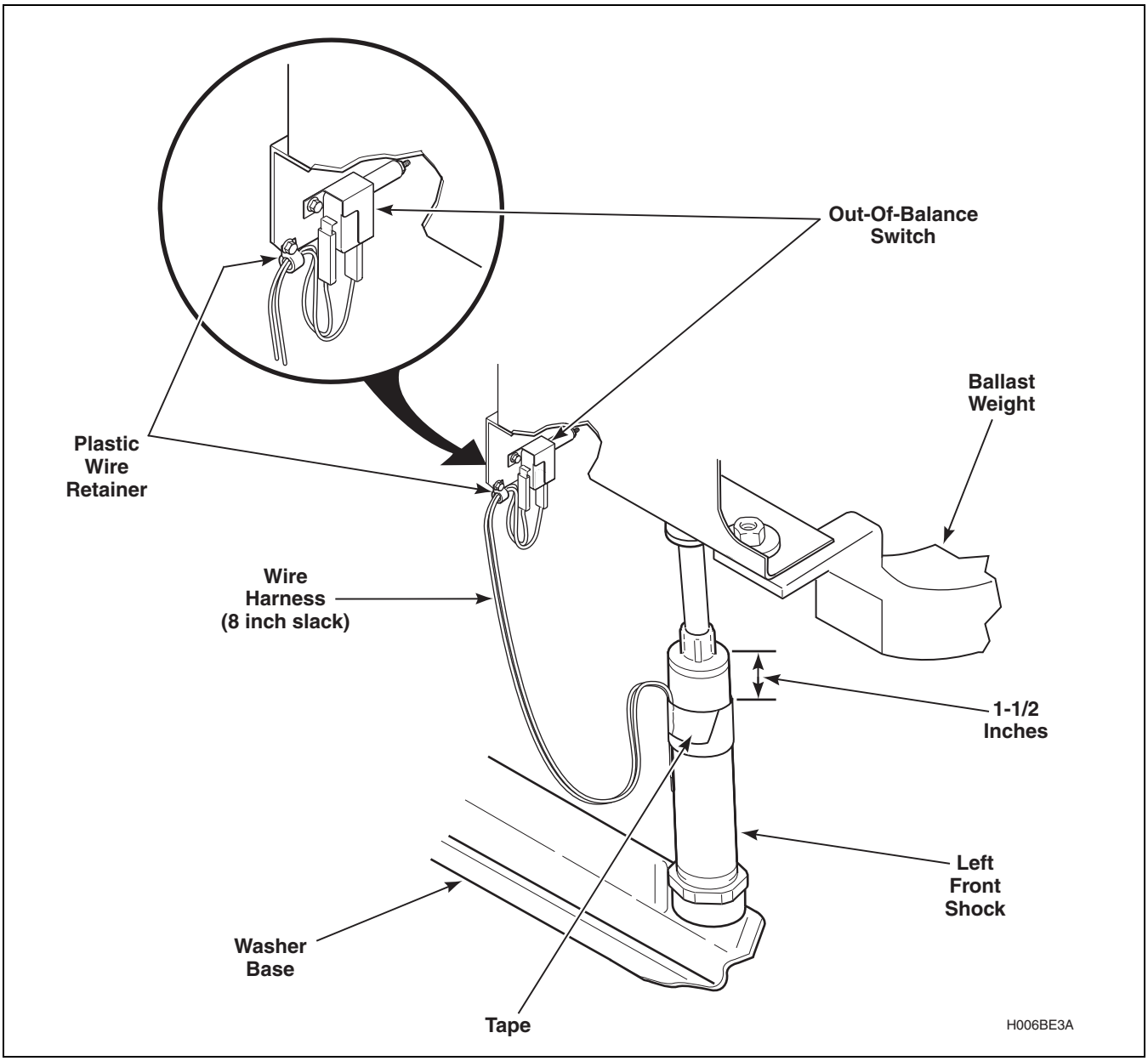

Figure 1

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WARNING

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W003

3. NO MOTOR ROTATION, OR DRIVE FAILURE CODE "E:DF" ON ELECTRONIC DISPLAY UNITS

NOTE: Verify that motor is receiving proper voltage. Disconnect electrical power to washer.

TEST PROCEDURE

a. At the rear of the washer, remove the lower access panel.
b. Reach in through the access panel opening and disconnect motor wire harness from motor.
c. Using an Ohmmeter, measure resistance at the terminals on the motor. Refer to *Table 1*.

Motor Resistance Values		
TACH INPUT	Terminals 6-7	Approximately 15 Ohms
BRUSHES	Terminals 4-5	Less than 70 Ohms
WINDING	Terminals 1-3	Approximately 1.1 Ohms
WINDING	Terminals 1-2	Approximately 2.0-2.4 Ohms
WINDING	Terminals 2-3	Approximately 3.4 Ohms
NOTE: Resistance values may vary depending on type of Ohmmeter used.		

Table 1

d. Replace motor if there is an open circuit on tach input (terminals 6-7) or winding circuits (terminals 1, 2 and 3), or if there is continuity between any terminal and the motor housing.
e. An open circuit between terminals 4 and 5 indicates a stuck or worn brush. Refer to appropriate service procedure below.

SERVICE PROCEDURE: STUCK BRUSHES

a. Remove motor from washer.
b. Using a flashlight, view brushes through holes in motor end shield. Refer to *Figure 2*.
c. Inspect both brushes to determine if either brush braided wire is binding the brush movement. The braided wire might be snagged on the seam in the corner of the metal brush holder. Refer to *Figure 2*.

NOTE: The copper braided wire should be located in the center of the brush assembly. If the braided wire has fallen to the bottom of the brush, it will cause binding.

d. After determining which brush assembly is binding, carefully use the tip of a small screwdriver to unsnag and reposition the braided wire. Refer to *Figure 3*. Make sure spring is making unobstructed contact with the end of the brush. Rotate armature by hand to assure that brushes are seated.
e. Recheck resistance between motor terminals 4 and 5 to verify the brush position has been corrected.
f. Reinstall motor in washer.
g. Run washer through cycle to verify proper operation.

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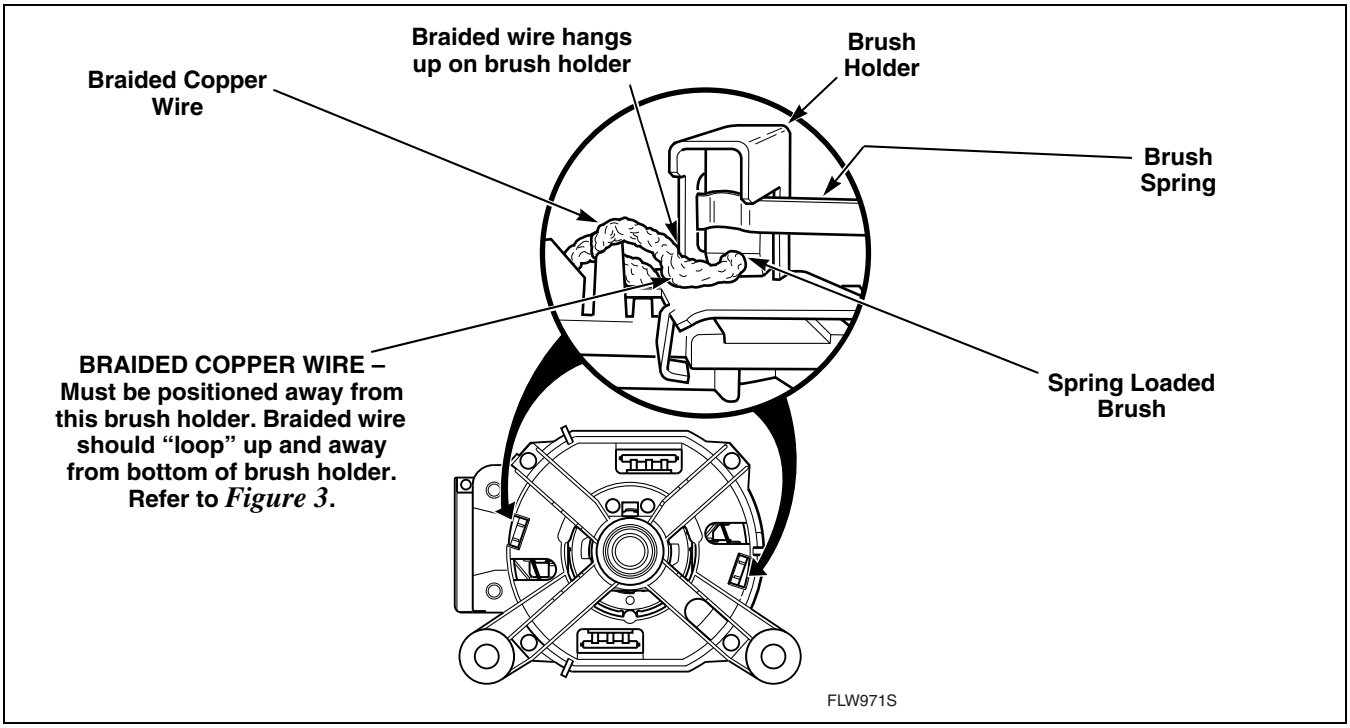

Figure 2

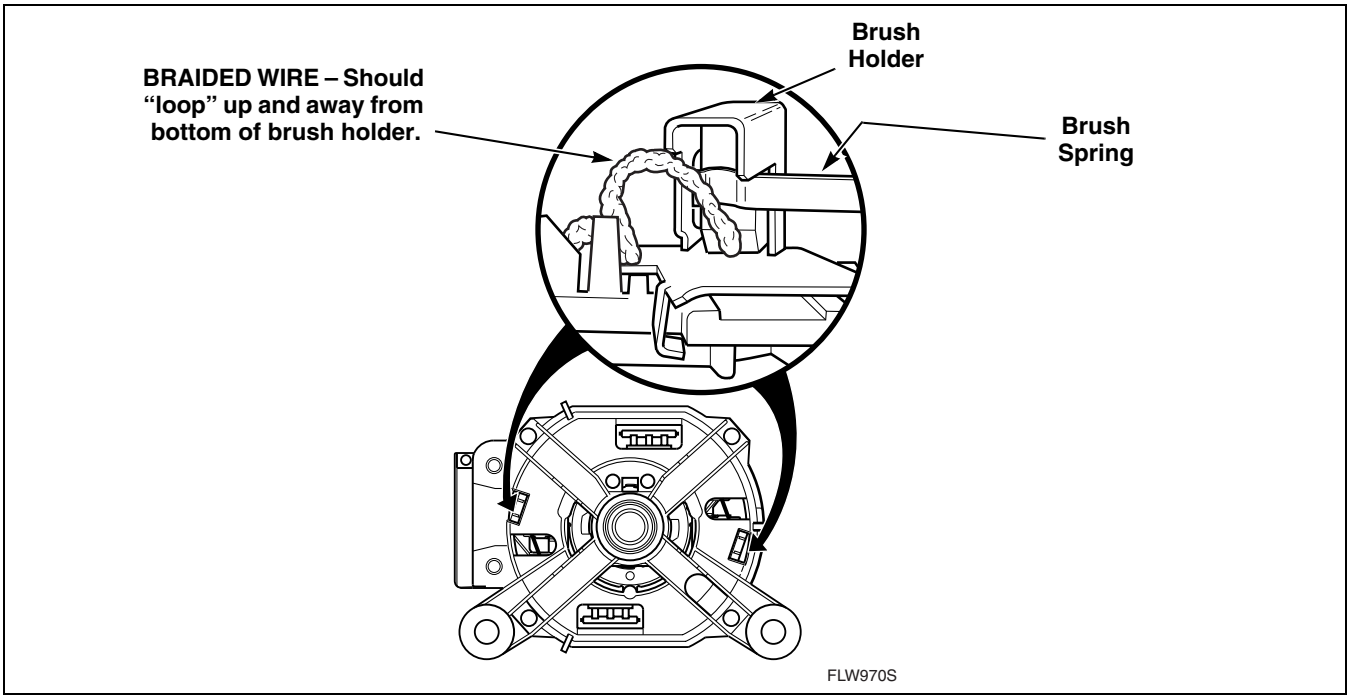

Figure 3

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WARNING

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- **Whenever ground wires are removed during servicing, these ground wires must be reconnected to ensure that the washer is properly grounded.**

W003

SERVICE PROCEDURE: WORN BRUSHES

a. Remove motor from washer.

b. Using a flashlight, view brushes through holes in motor end shield. Refer to *Figure 4*.

c. Inspect both brushes to determine if either brush is worn. Refer to *Figures 4* and *5*.

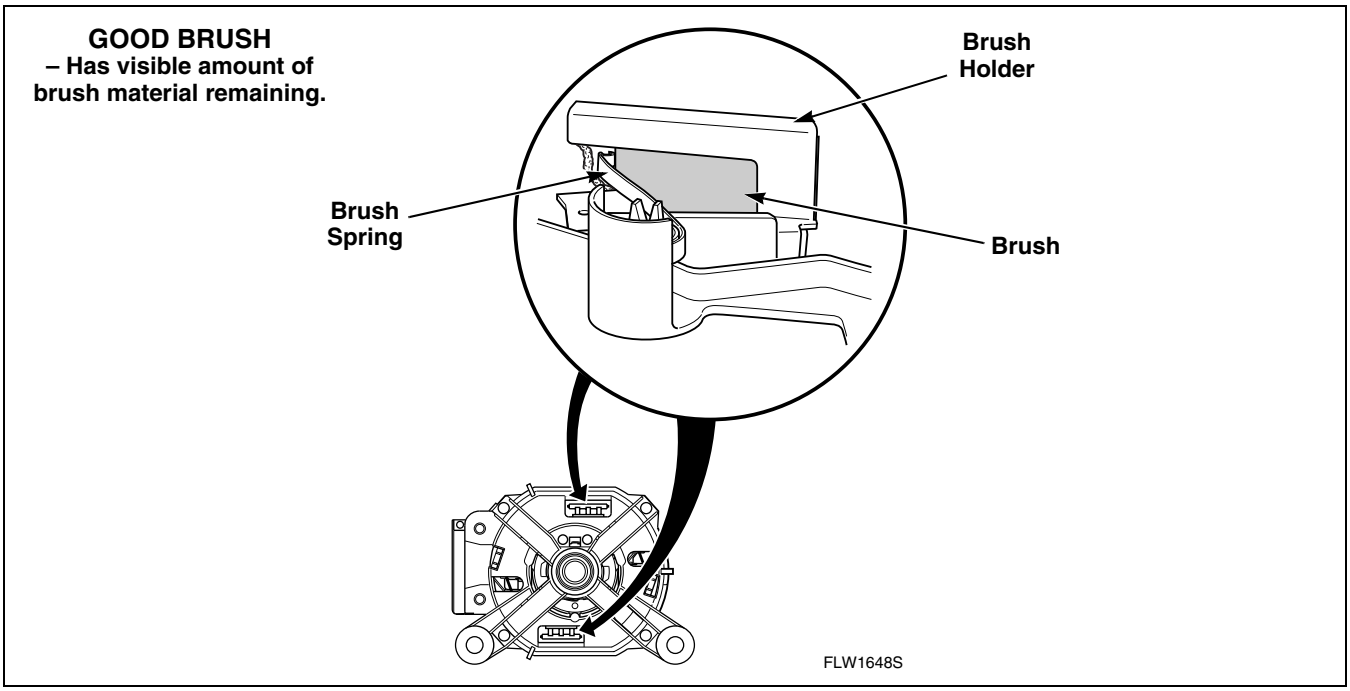

Figure 4

d. Replace worn brushes with 738P3 Motor Brush Kit. Follow instructions provided in kit.

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W003

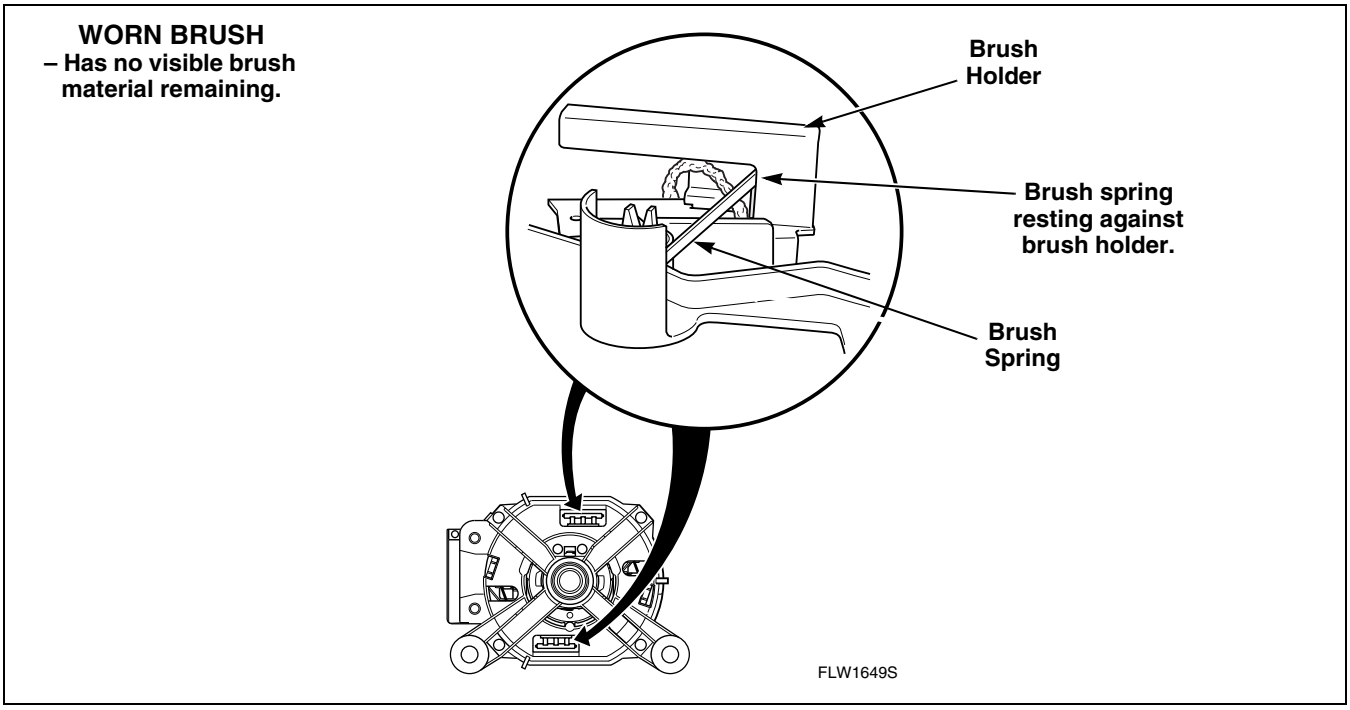

Figure 5

SERVICE PROCEDURE: CLOGGED BRUSHES

a. Remove motor from washer.
b. Using a flashlight, view brushes through holes in motor end shield. Refer to *Figure 4*.
c. Inspect both brushes to determine if they are clogged due to a build-up of carbon dust.
d. If there is a visible amount of brush left, use a screwdriver or similar device to push brush back and forth to loosen and remove dust. Refer to *Figure 4*.

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Section 4
Troubleshooting

WARNING

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- **Never start the washer with any guards/panels removed.**
- **Whenever ground wires are removed during servicing, these ground wires must be reconnected to ensure that the washer is properly grounded.**

W003

FLOW CHARTS AND SCHEMATICS FOUND ON THE FOLLOWING PAGES ARE FOR MODELS COVERED IN THIS MANUAL.

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WARNING

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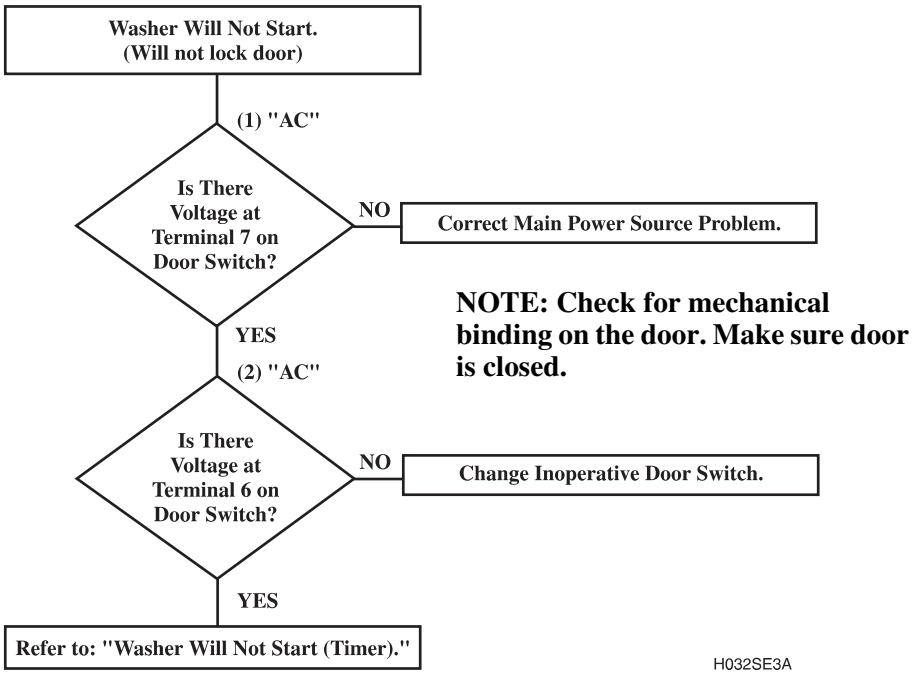
W003

4. WASHER WILL NOT START (DOOR SWITCH ANALYSIS)

NOTE: If power is disconnected and reconnected, timer knob must be pulled out to energize washer electrical system.



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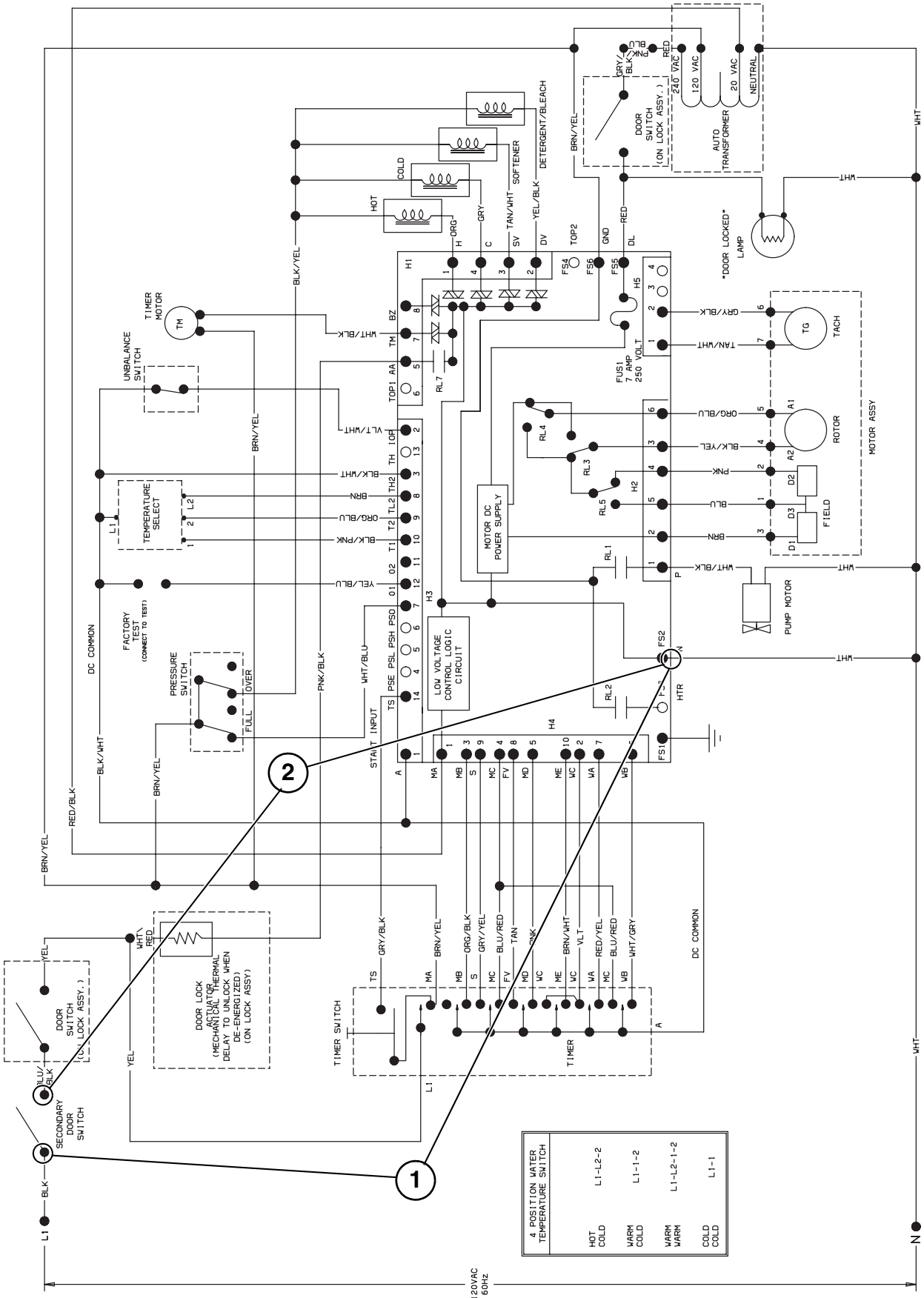

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WARNING

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- **Never start the washer with any guards/panels removed.**
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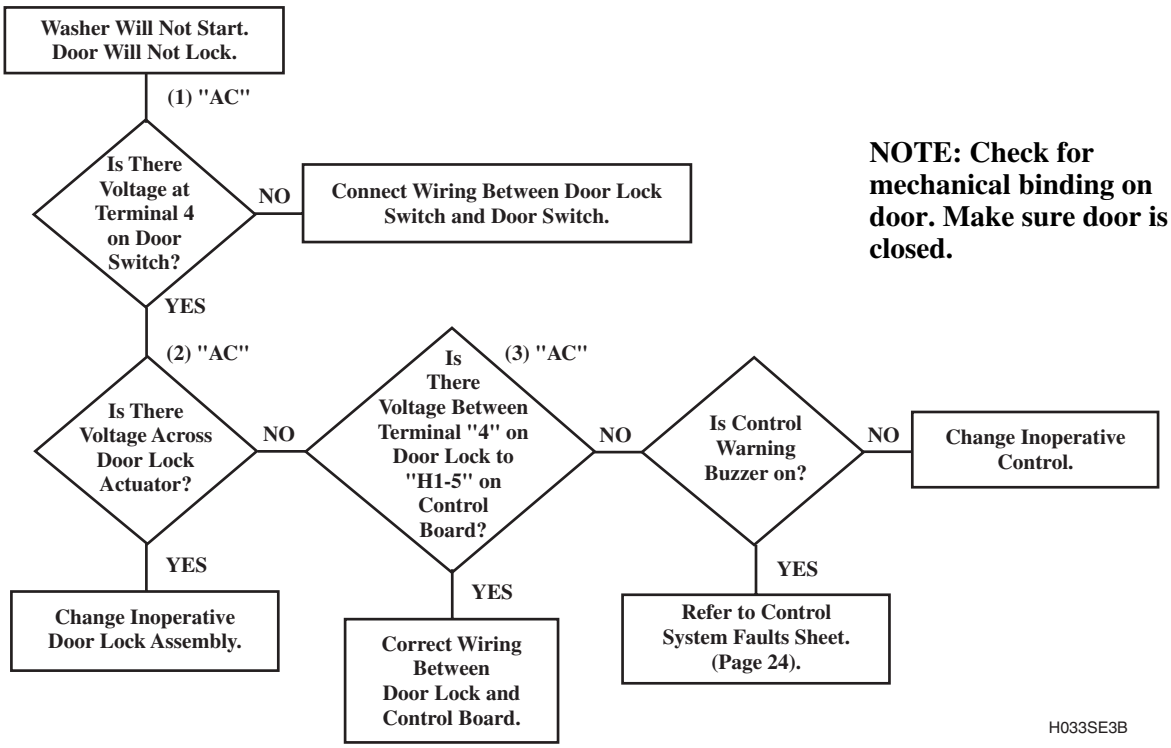
W003

5. WASHER WILL NOT START (DOOR LOCK SWITCH ANALYSIS)

NOTE: If power is disconnected and reconnected, timer knob must be pulled out to energize washer electrical system.



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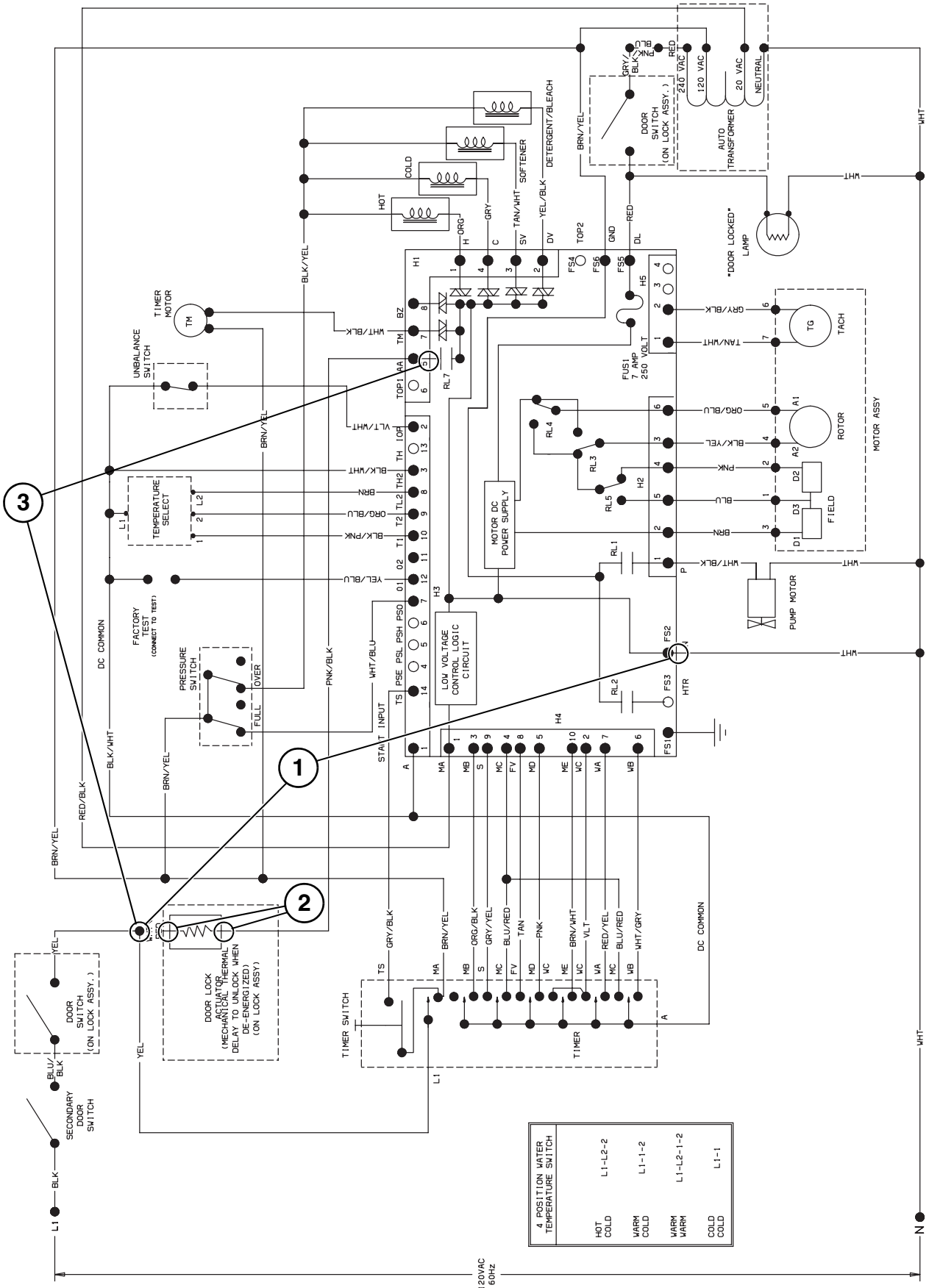

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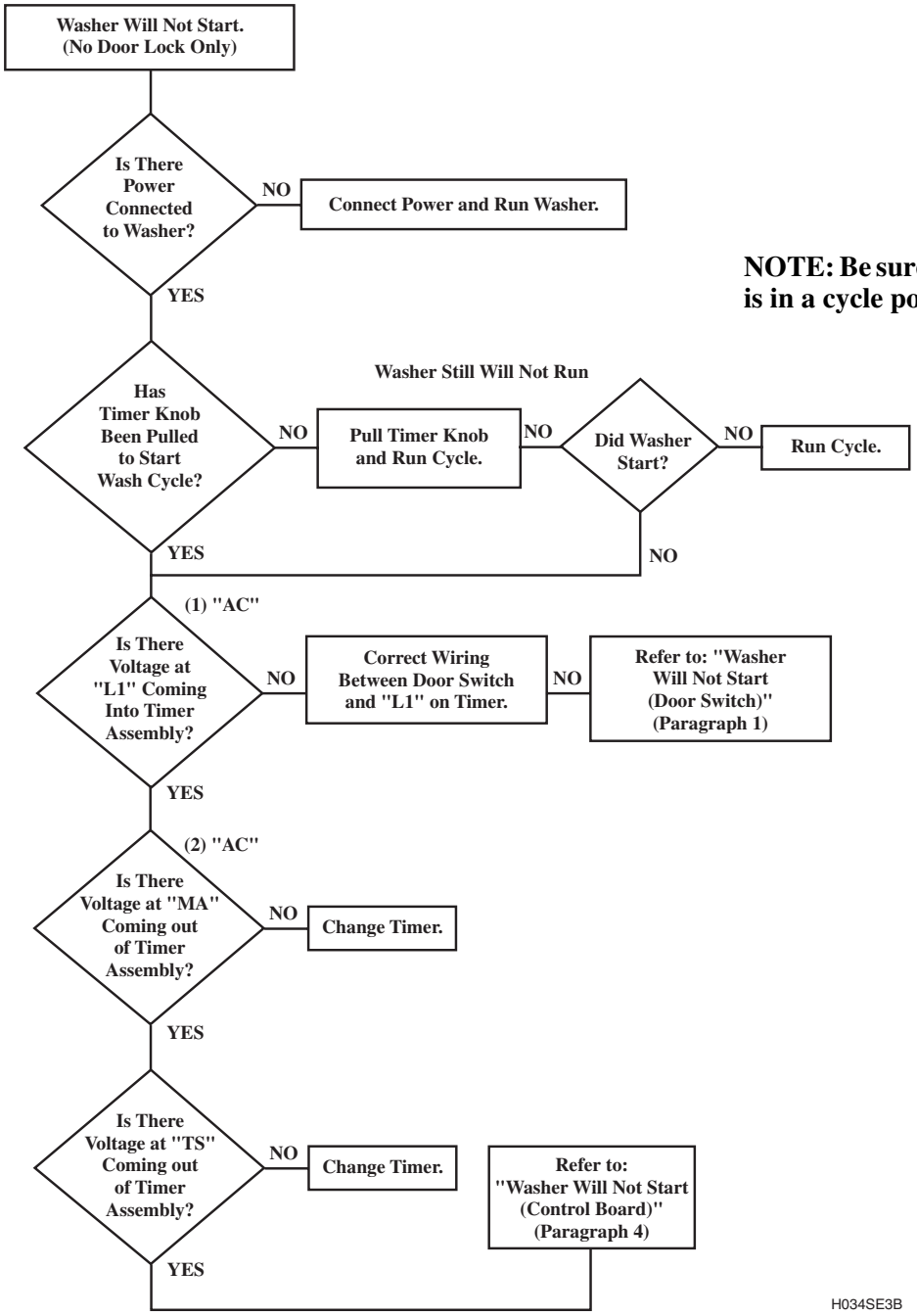
- **Whenever ground wires are removed during servicing, these ground wires must be reconnected to ensure that the washer is properly grounded.**

W003

6. WASHER WILL NOT START (TIMER)

NOTE: If power is disconnected and reconnected, timer knob must be pulled out to energize washer electrical system.



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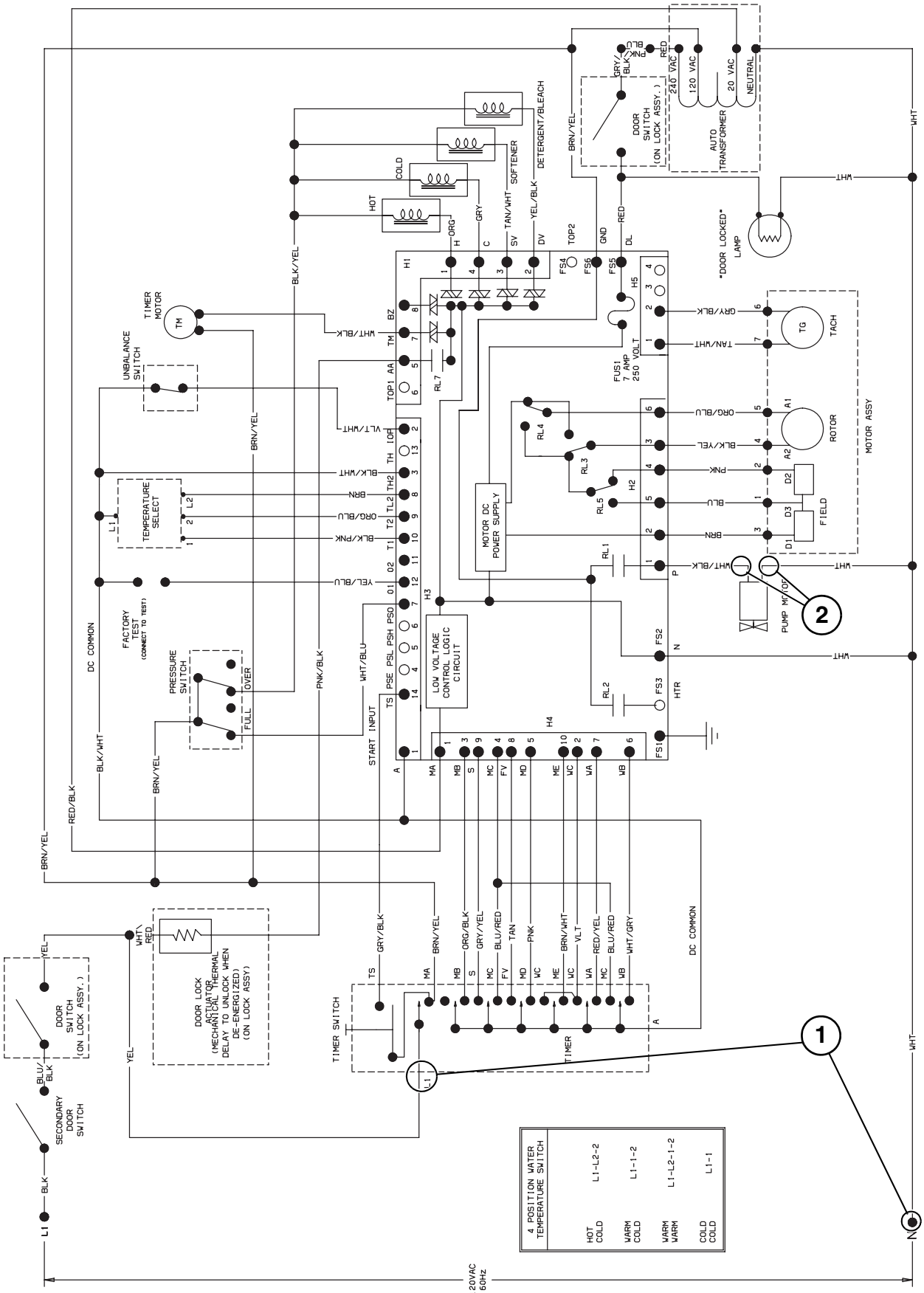

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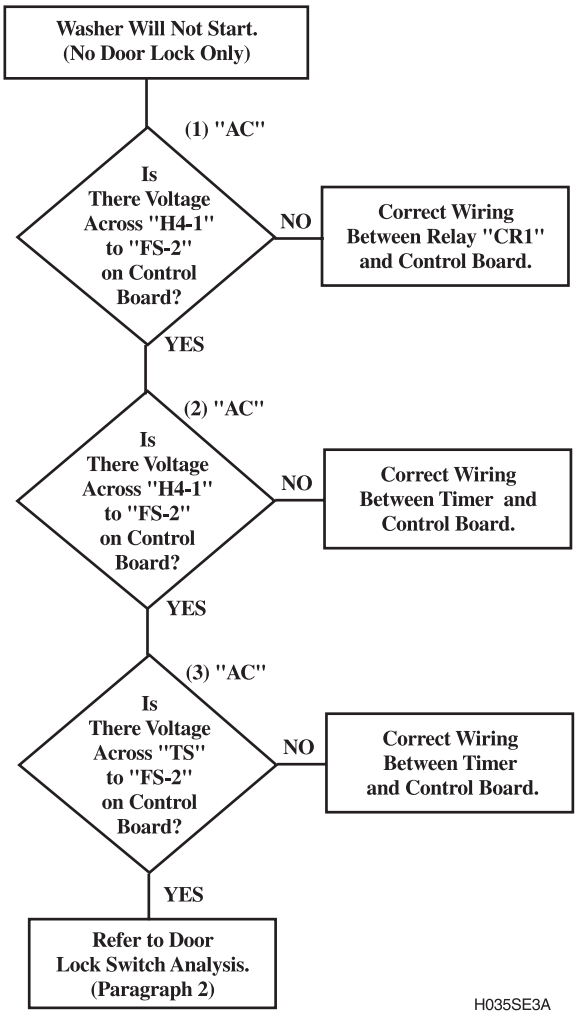
W003

7. WASHER WILL NOT START (CONTROL BOARD)

NOTE: If power is disconnected and reconnected, timer knob must be pulled out to energize washer electrical system.



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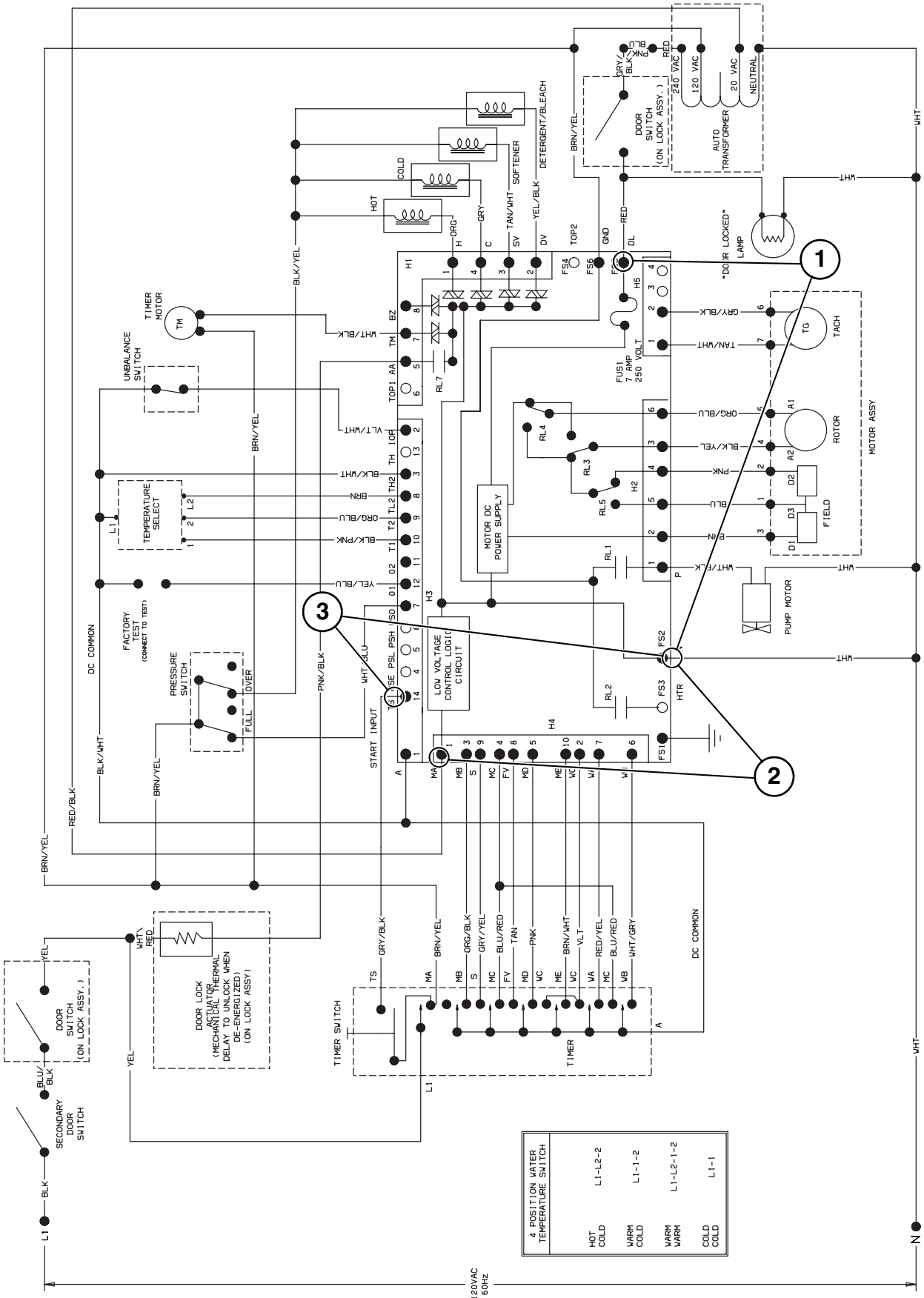

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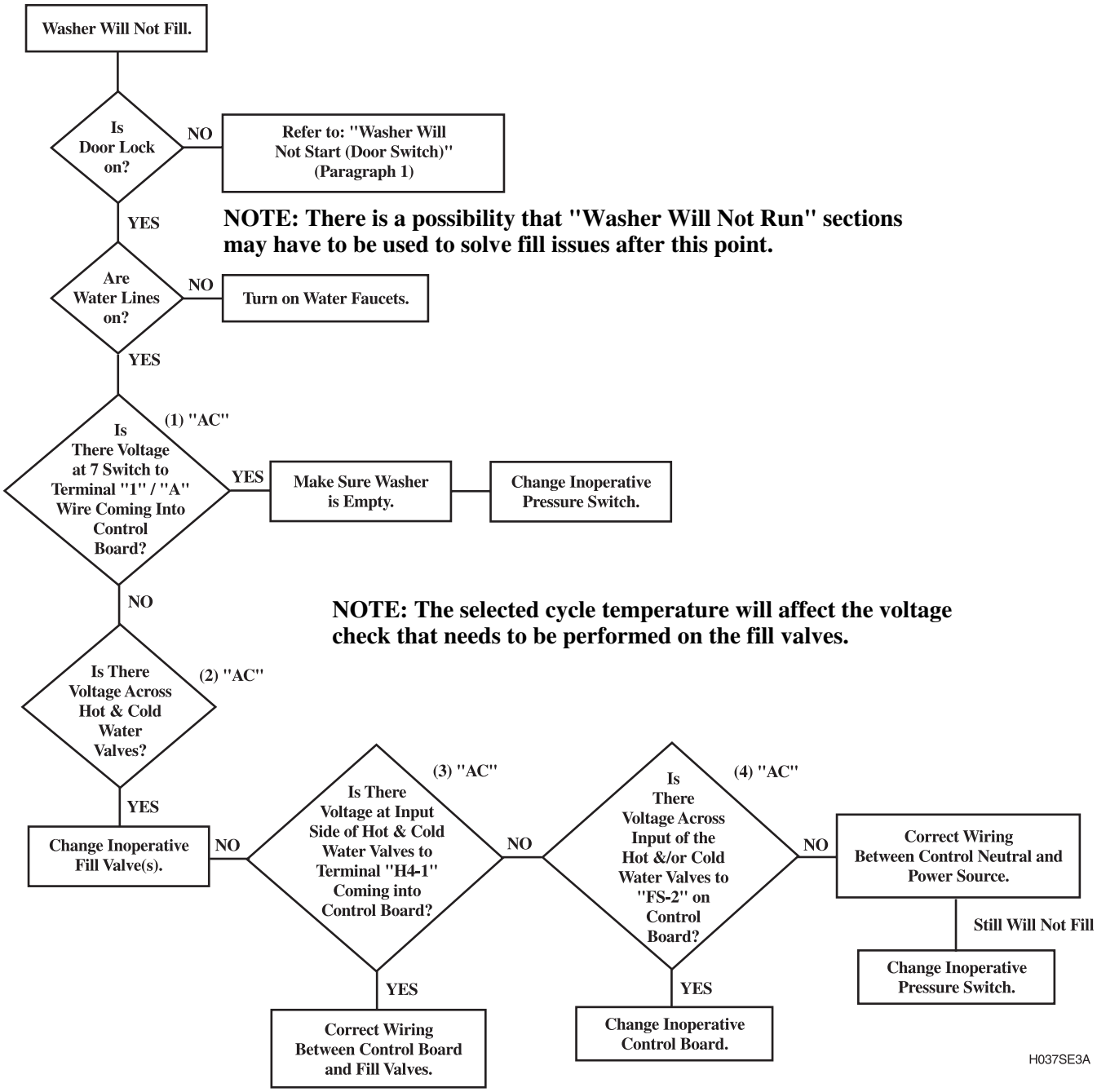
W003

8. WASHER WILL NOT FILL

NOTE: If power is disconnected and reconnected, timer knob must be pulled out to energize washer electrical system.



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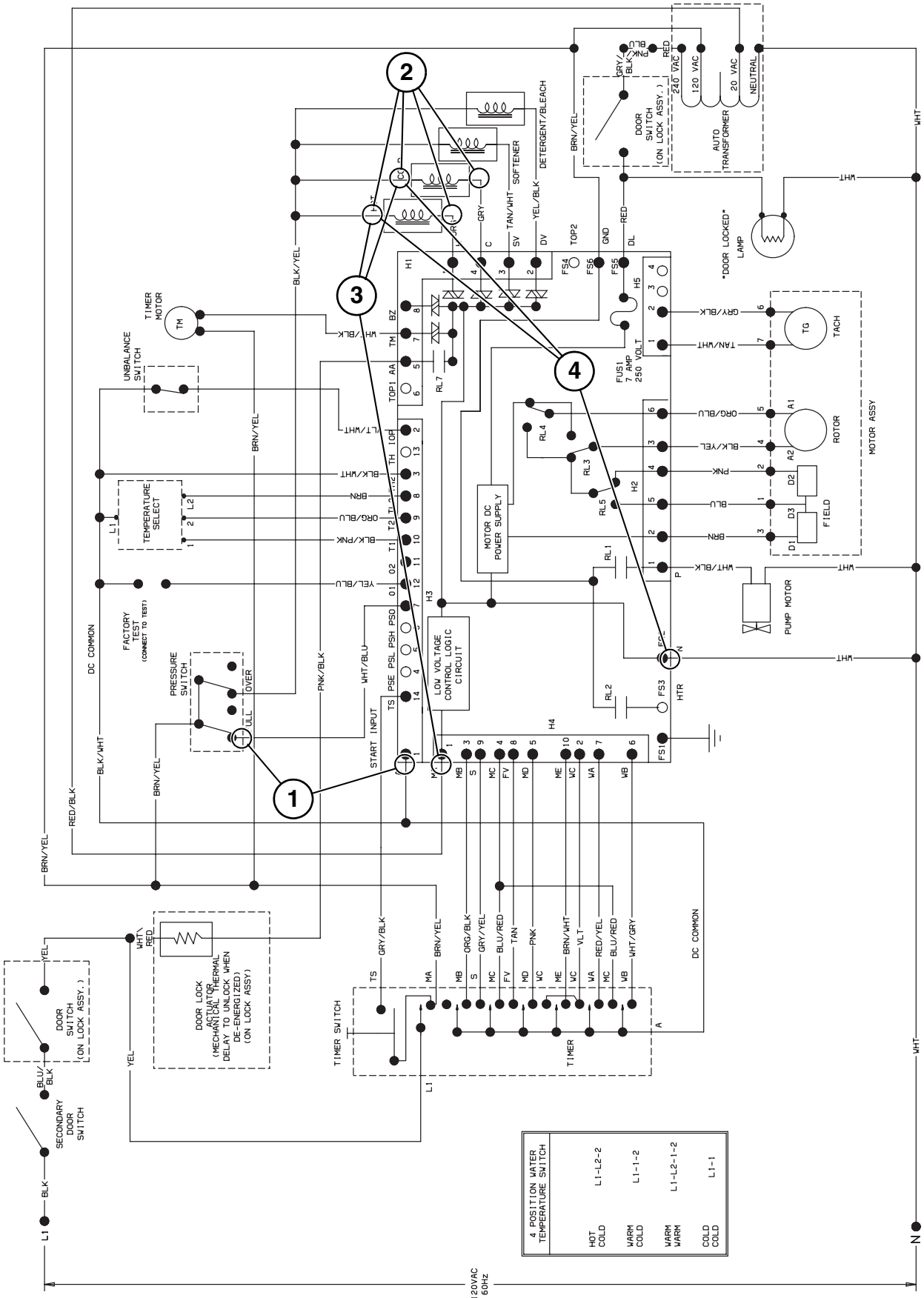

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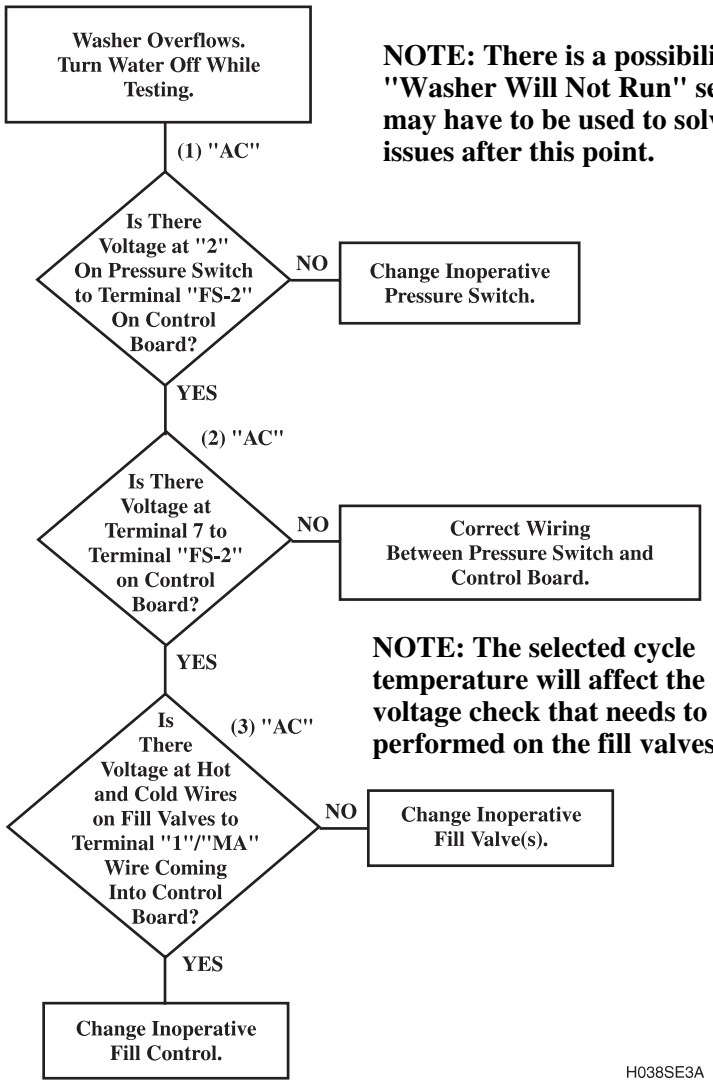
W003

9. WASHER OVERFLOWS

NOTE: If power is disconnected and reconnected, timer knob must be pulled out to energize washer electrical system.



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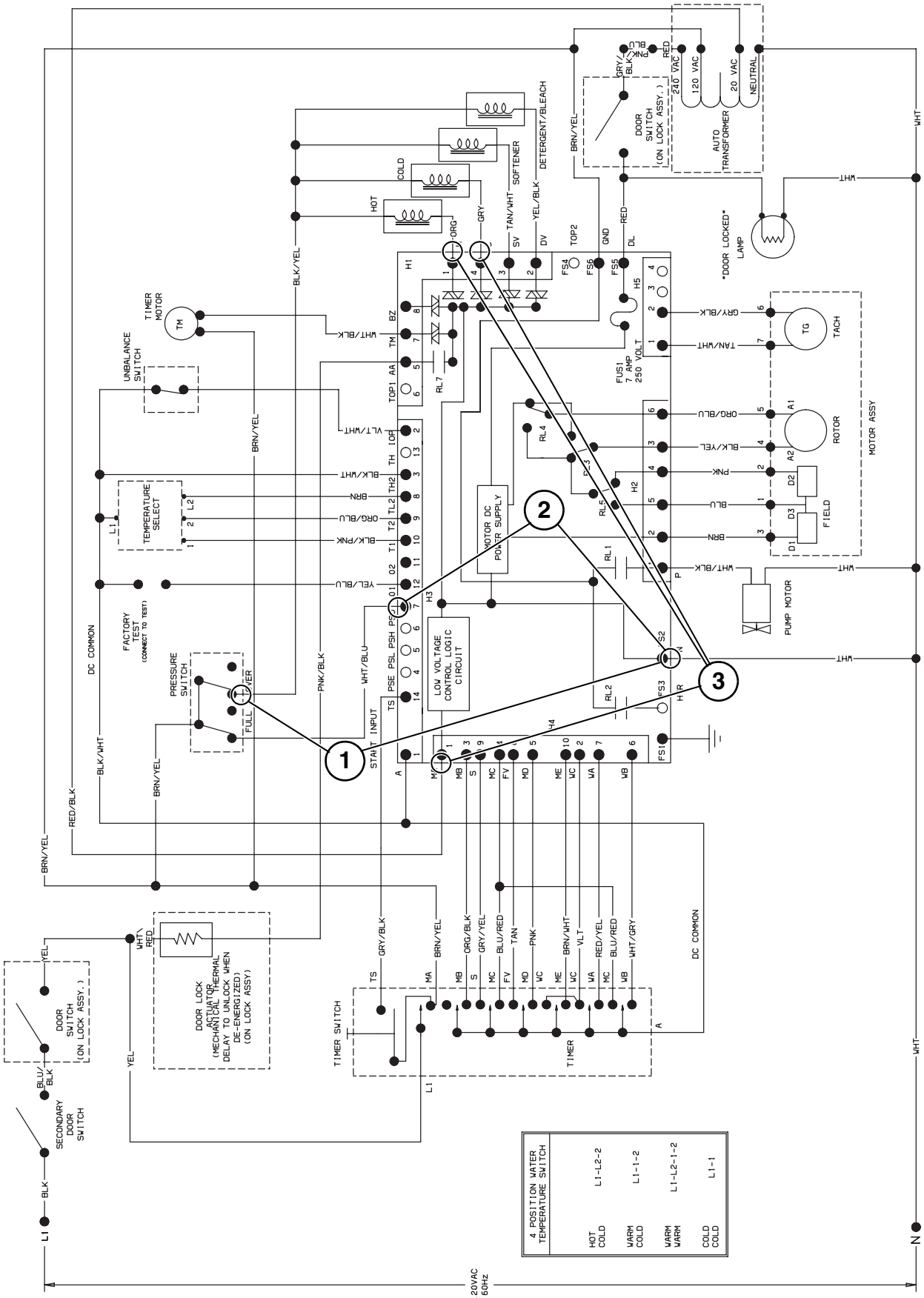

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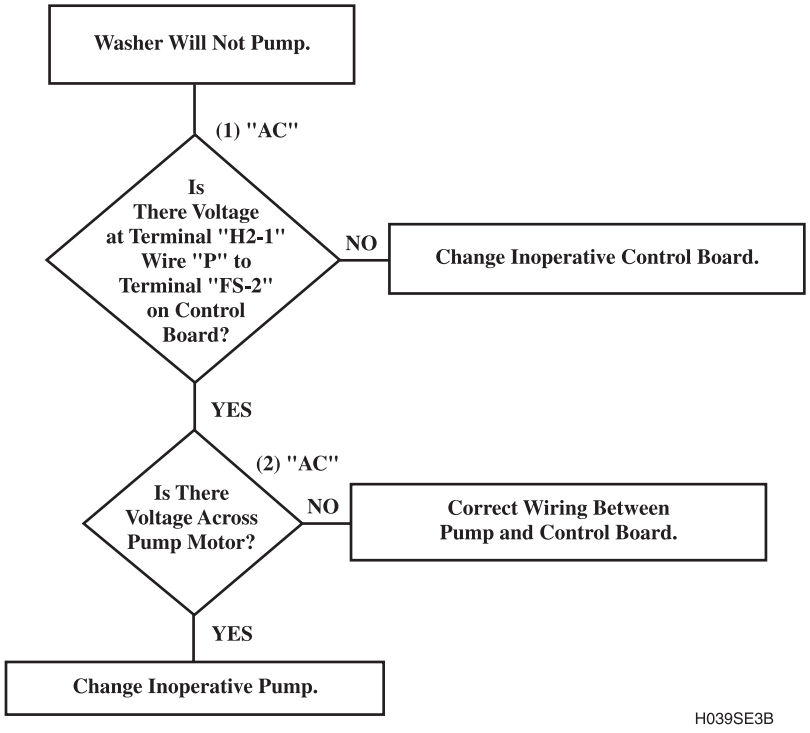
WARNING

To reduce the risk of electric shock, fire, explosion, serious injury or death:
- **Disconnect electric power to the washer before servicing.**
- **Never start the washer with any guards/panels removed.**
- **Whenever ground wires are removed during servicing, these ground wires must be reconnected to ensure that the washer is properly grounded.**

W003

10. WASHER WILL NOT PUMP

NOTE: If power is disconnected and reconnected, timer knob must be pulled out to energize washer electrical system.



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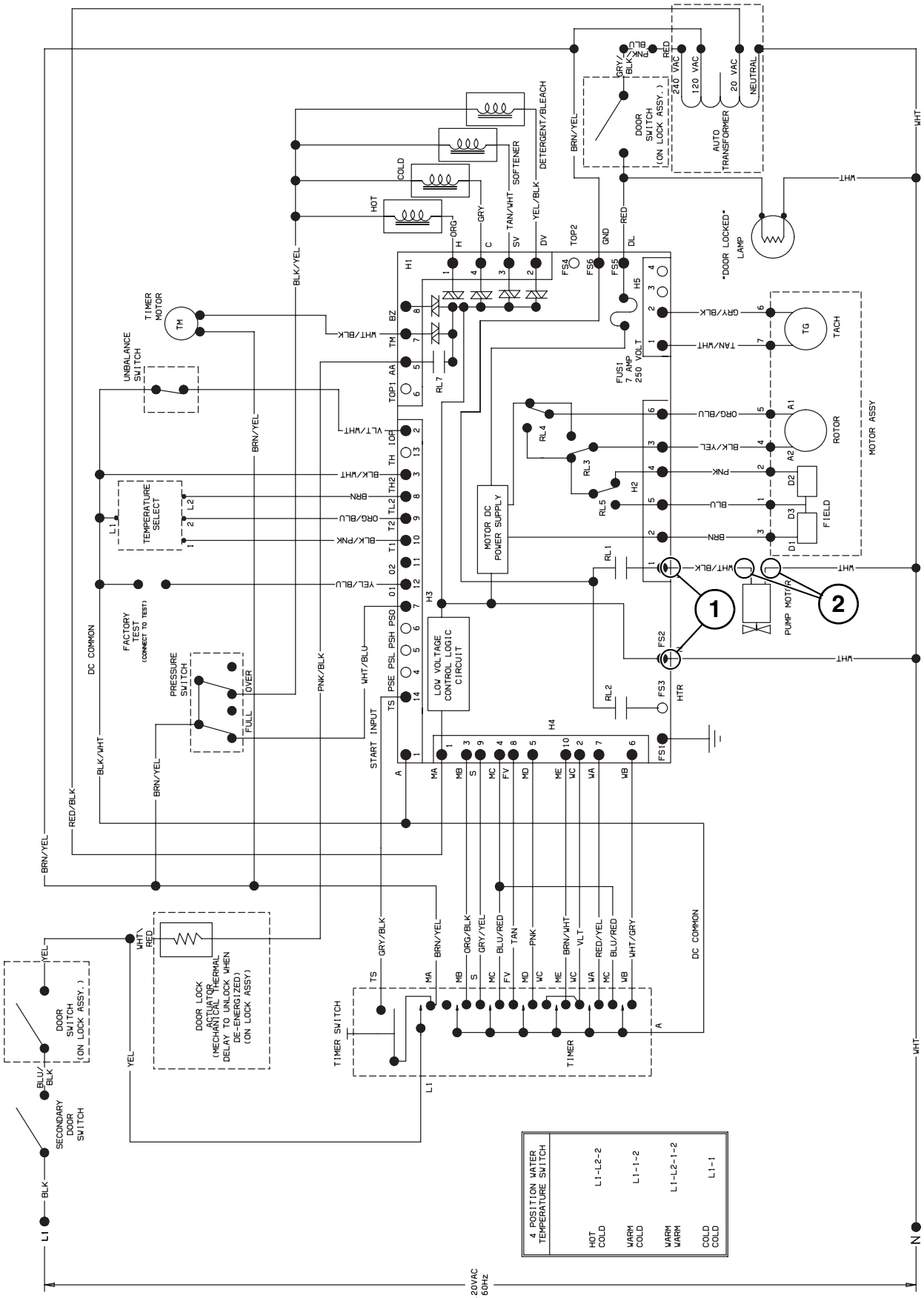

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WARNING

To reduce the risk of electric shock, fire, explosion, serious injury or death:
- **Disconnect electric power to the washer before servicing.**
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- **Whenever ground wires are removed during servicing, these ground wires must be reconnected to ensure that the washer is properly grounded.**

W003

Control System Faults

Shown below are the system faults that will cause control to shut down and sound the BUZZER continuously until electrical power to washer is turned off.

INOPERATIVE CONDITION	SERVICE CORRECTION
Triac in motor control board shorted.	Change control board. Check motor.
Motor tachometer feedback signal circuit open.	Correct wiring between control board and motor. Change motor.
Motor circuit fuse blown.	Change “FUS1” on control board and check washer cylinder. Motor for mechanical binding.
Motor fails to spin up to correct speed in predetermined time.	Check washer cylinder. Motor for mechanical binding. Change motor.
Control door lock relay contact failure.	Refer to *“Washer Will Not Start”* (Door lock switch analysis). Refer to *Paragraph 5*.
Washer tries to agitate for more than 40 minutes after water level is attained.	Check wiring to timer. Check voltage at timer. Change timer.

Washer “DC” Motor Functions

Agitate

For agitate, the “DC” current will flow through the full field (D1, D2) of motor. The washer agitation is produced by reversing polarity of the rotor in motor. This polarity switching takes place on control board.

- One direction RL3 and RL4 are not operated.
- The other direction RL3 and RL4 are operated.

Refer to wiring schematics on following pages.

Spin

For spin (0 - 650 rpm), the “DC” current will flow through the full field (D1, D2) of motor. For high speed spin (+ 650 rpm), the “DC” voltage will flow through half the field (D1, D3) of motor.

Refer to wiring schematic on following pages.

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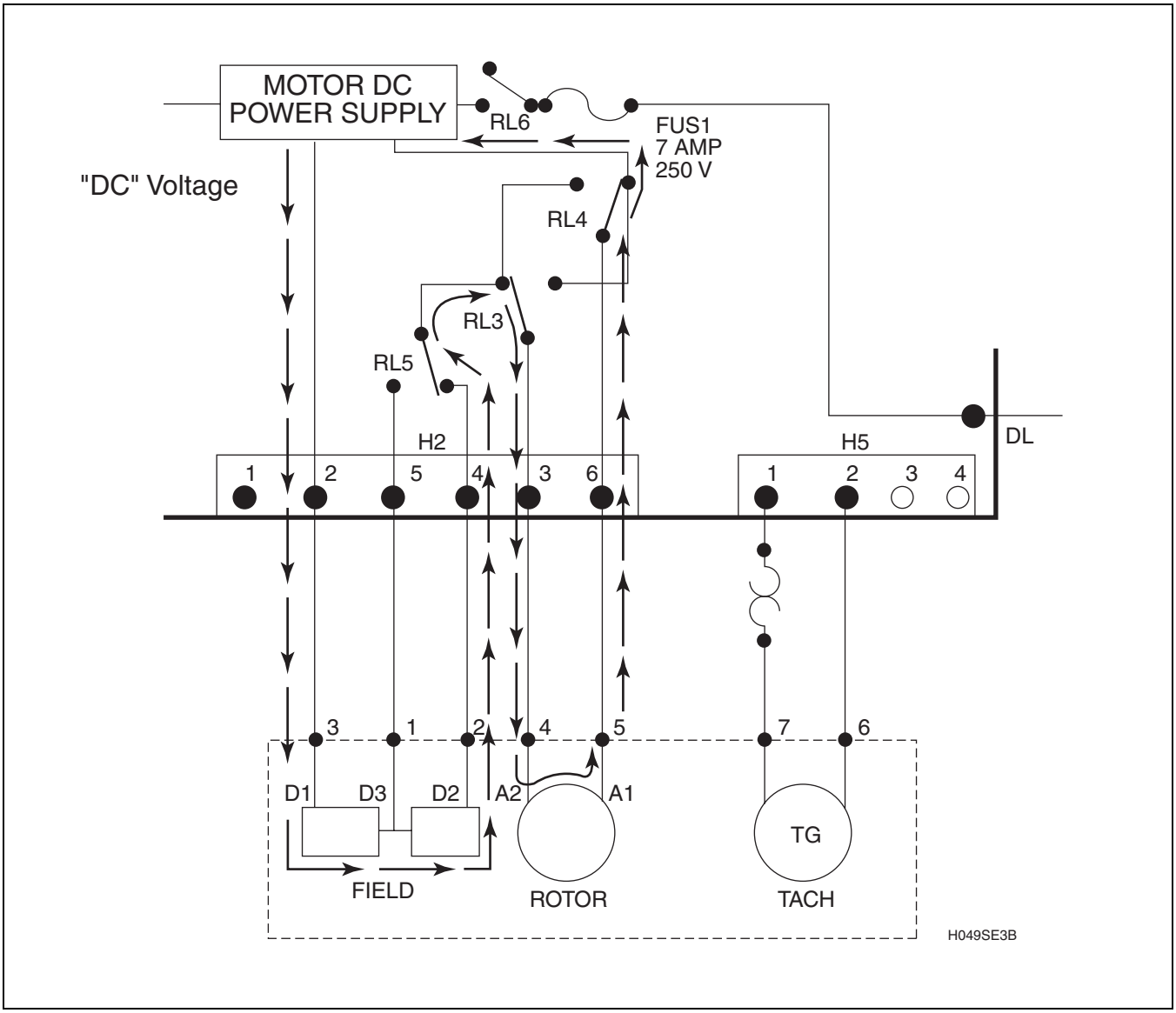

Motor Assembly

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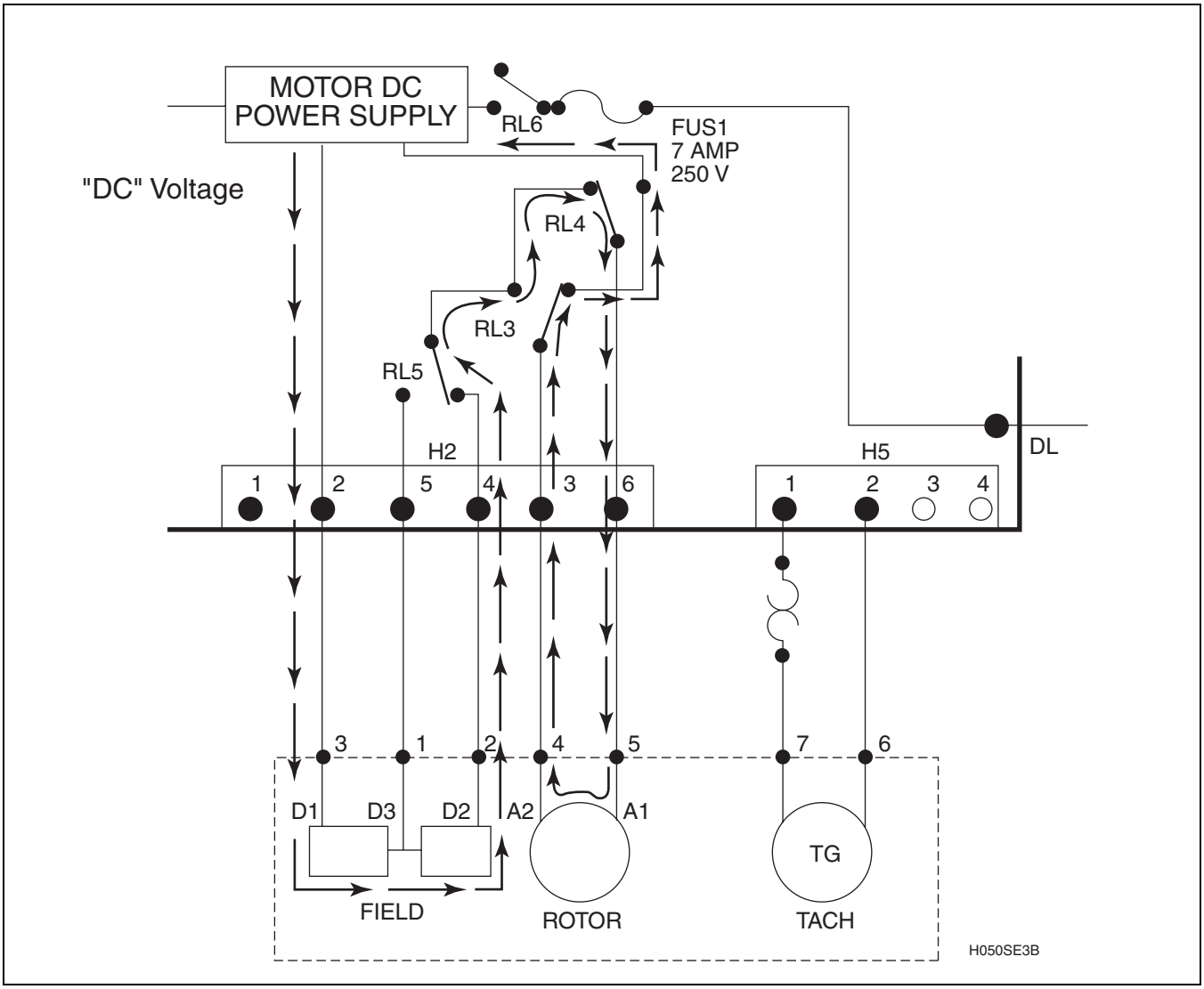

Motor Assembly

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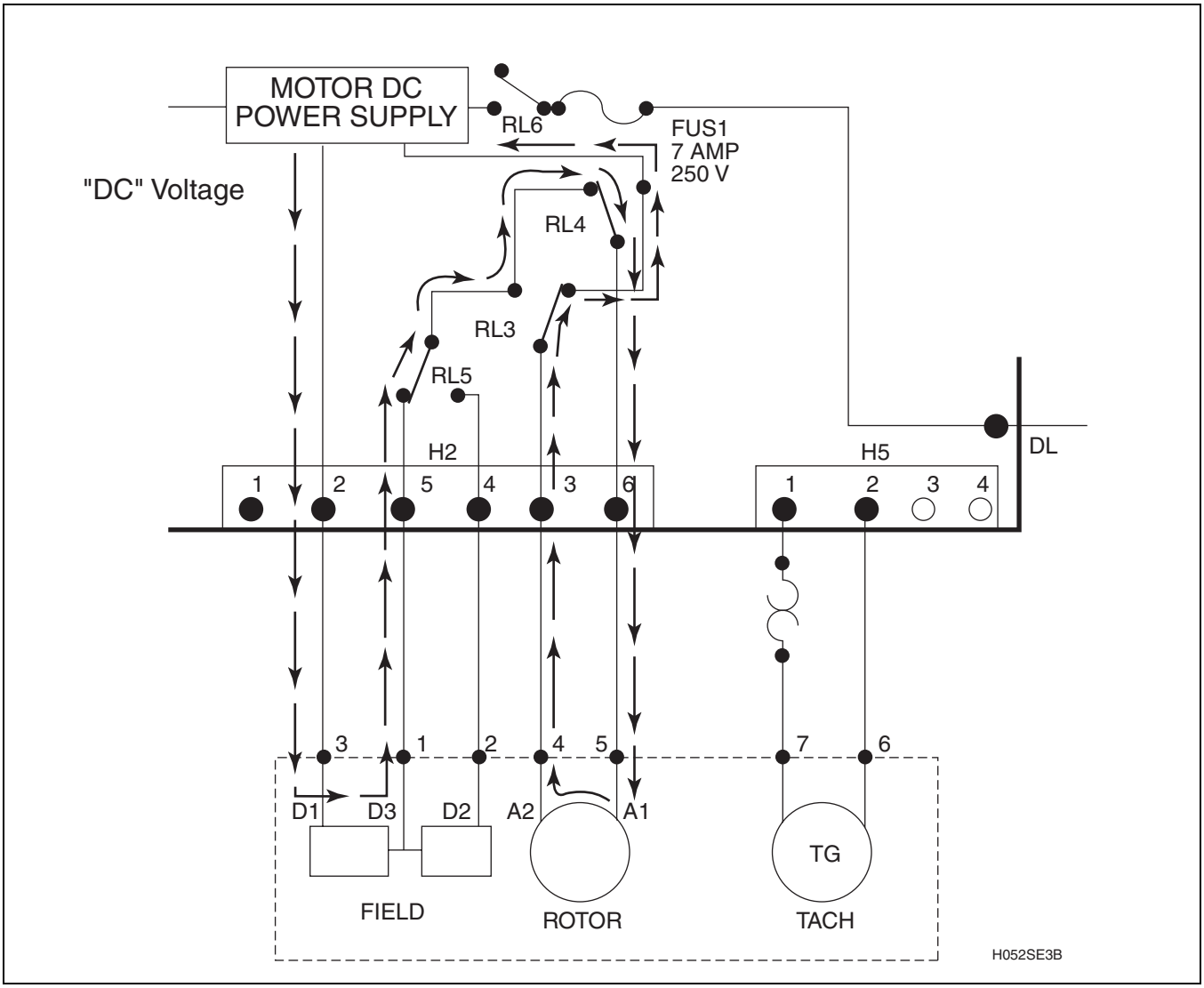

Motor Assembly

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Notes

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Section 5
Grounding

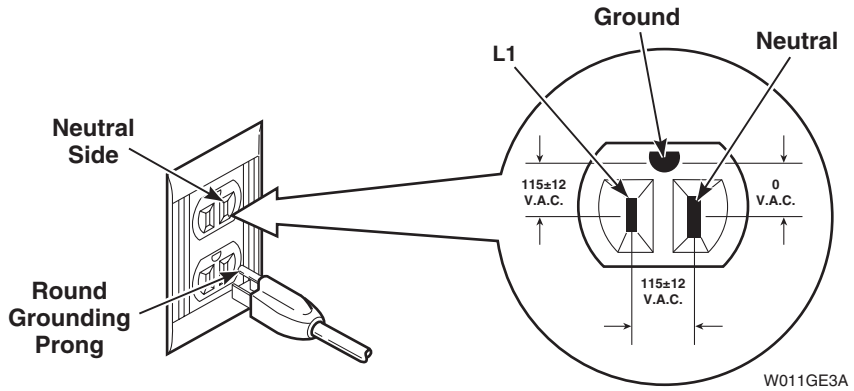
WARNING

To reduce the risk of electric shock, fire, explosion, serious injury or death:
- **Disconnect electric power to the washer before servicing.**
- **Never start the washer with any guards/panels removed.**
- **Whenever ground wires are removed during servicing, these ground wires must be reconnected to ensure that the washer is properly grounded.**

W003

11. WALL RECEPTACLE POLARITY CHECK

Refer to *Figure 6*



NOTE: Have a qualified electrician check polarity of wall receptacle. If a voltage reading is measured other than that illustrated, the qualified electrician should correct the problem.

Figure 6

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WARNING

To reduce the risk of electric shock, fire, explosion, serious injury or death:
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- **Whenever ground wires are removed during servicing, these ground wires must be reconnected to ensure that the washer is properly grounded.**

W003

12. MACHINE GROUND CONNECTIONS - REAR CONTROL WASHERS

Refer to *Figure 7*

1 Ground to Control Panel Assembly

2 Ground to Motor Control Board

3 Ground to Control Hood

4 Ground Power Cord to Cabinet Top

5 Ground to Rear Access Panel

6 Ground to Motor

7 Ground to Drain Pump

8 Ground to Motor Bracket

9 Ground to Outer Tub

10 Ground to Outer Tub Front

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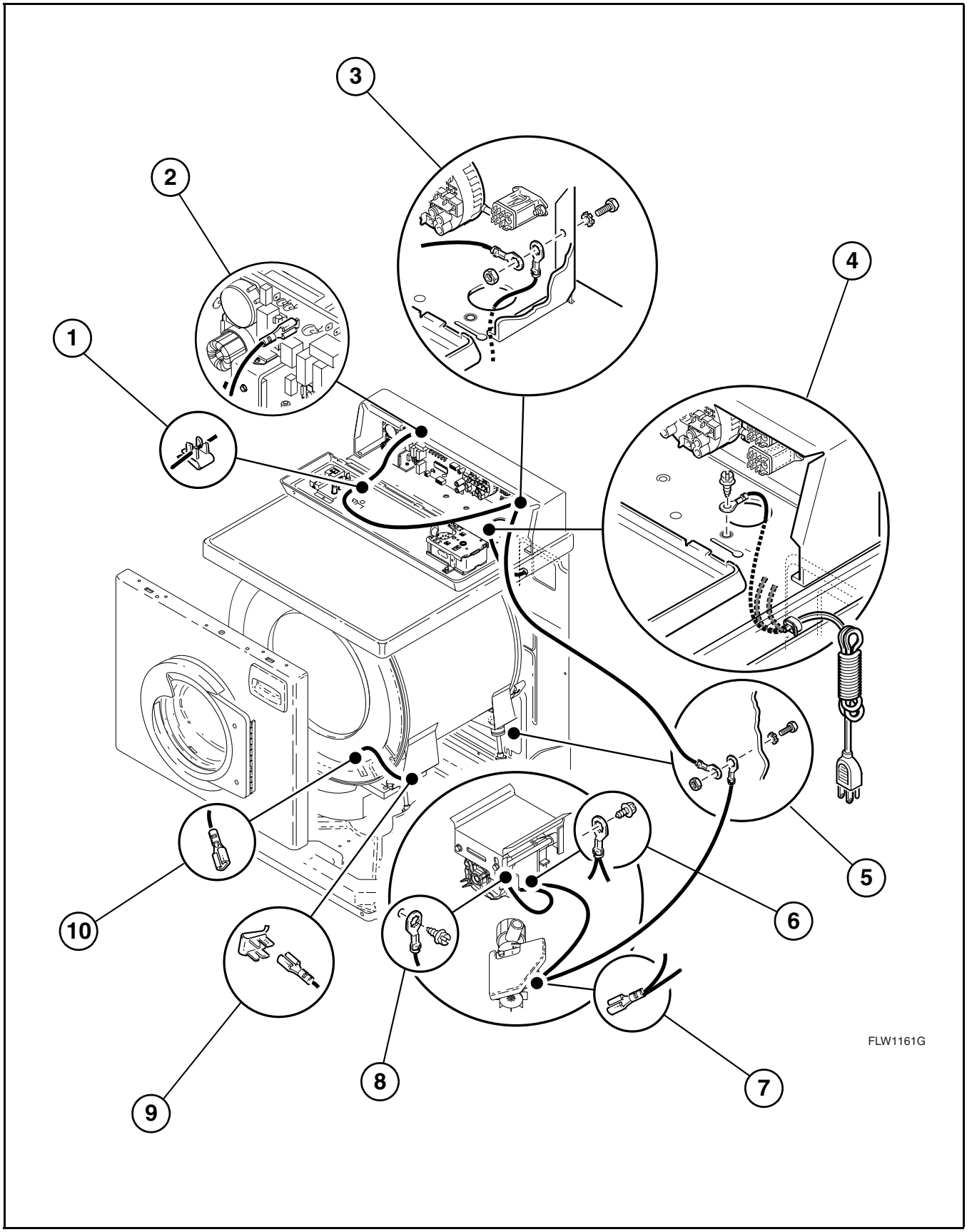

Figure 7
REAR CONTROL WASHERS

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WARNING

To reduce the risk of electric shock, fire, explosion, serious injury or death:
- **Disconnect electric power to the washer before servicing.**
- **Never start the washer with any guards/panels removed.**
- **Whenever ground wires are removed during servicing, these ground wires must be reconnected to ensure that the washer is properly grounded.**

W003

13. MACHINE GROUND CONNECTIONS - FRONT CONTROL WASHERS

Refer to *Figure 8*

1 Ground to Control Panel Assembly
2 Ground to Control Cabinet Base
3 Ground to Control Shield
4 Ground to Motor Control Board
5 Ground Power Cord to Control Cabinet
6 Grounding Hardware to Control Cabinet
7 Ground to Motor
8 Ground to Drain Pump
9 Ground to Motor Bracket
10 Ground to Outer Tub
11 Ground to Outer Tub Front

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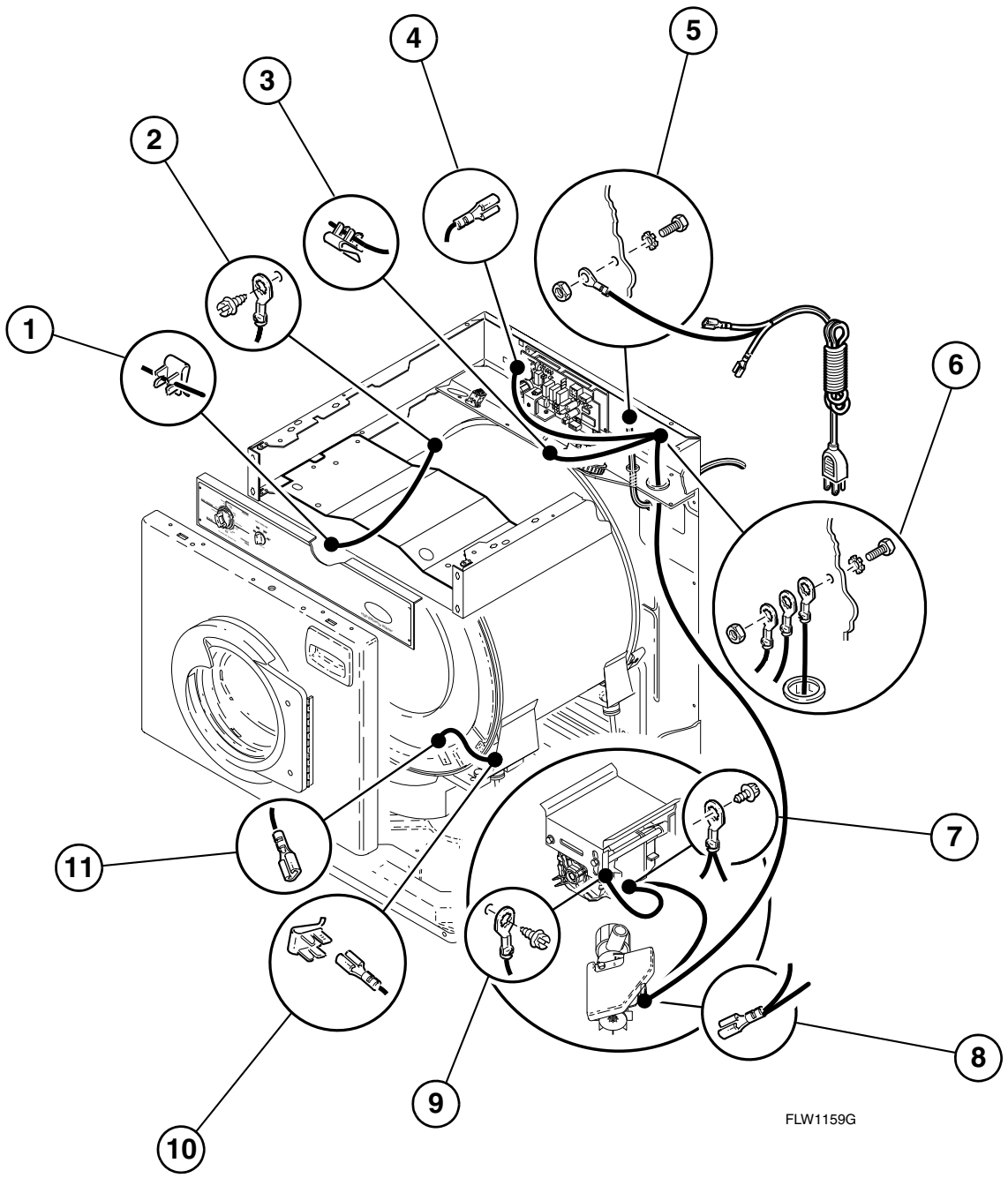

Figure 8
FRONT CONTROL WASHERS

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Notes

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Section 6
Service Procedures

WARNING

To reduce the risk of electric shock, fire, explosion, serious injury or death:
- **Disconnect electric power to the washer before servicing.**
- **Never start the washer with any guards/panels removed.**
- **Whenever ground wires are removed during servicing, these ground wires must be reconnected to ensure that the washer is properly grounded.**

W003

IMPORTANT: When reference is made to directions (right or left) in this manual, it is from operator's position facing front of washer.

14. CONTROL HOOD ASSEMBLY – REAR CONTROL WASHERS

a. Remove three screws holding rear of hood assembly to control hood rear panel. Refer to *Figure 9*.

b. Pivot hood assembly forward on cabinet top. Refer to *Figure 9*.

c. Carefully remove bottom front of hood from clips on cabinet top.

d. Disconnect wires from components and carefully remove components from hood assembly.

NOTE: Refer to wiring diagram when rewiring component parts.

TO REMOVE CONTROL HOOD END PANELS

Remove two screws holding each end panel to control mounting plate. Refer to *Figure 10*.

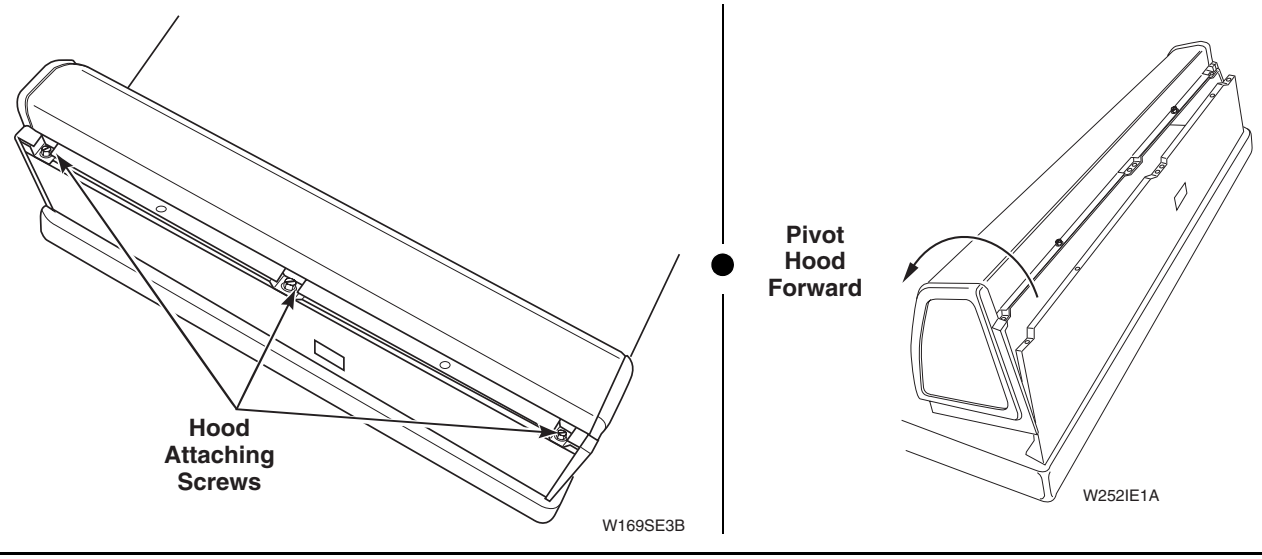

Figure 9

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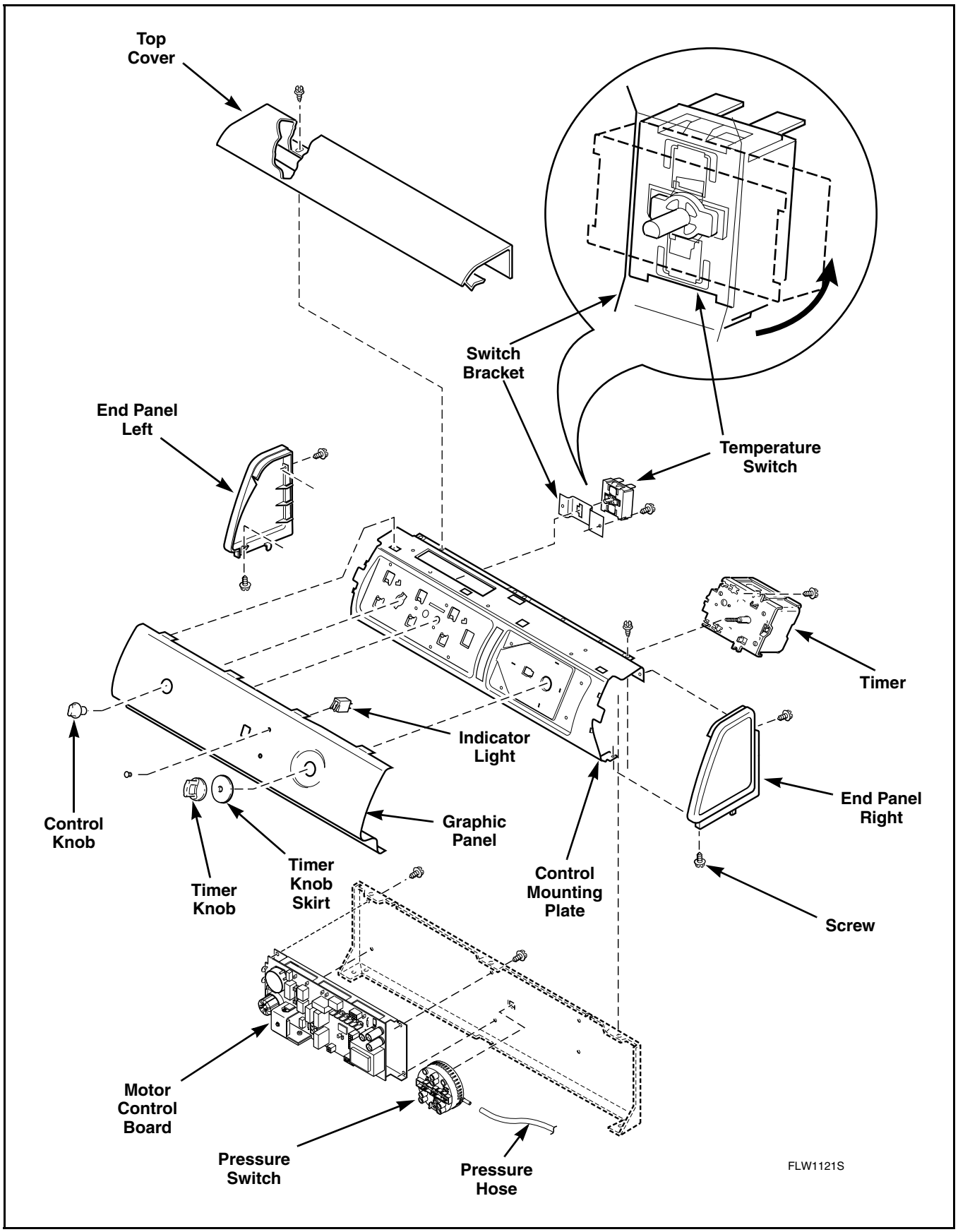

Figure 10

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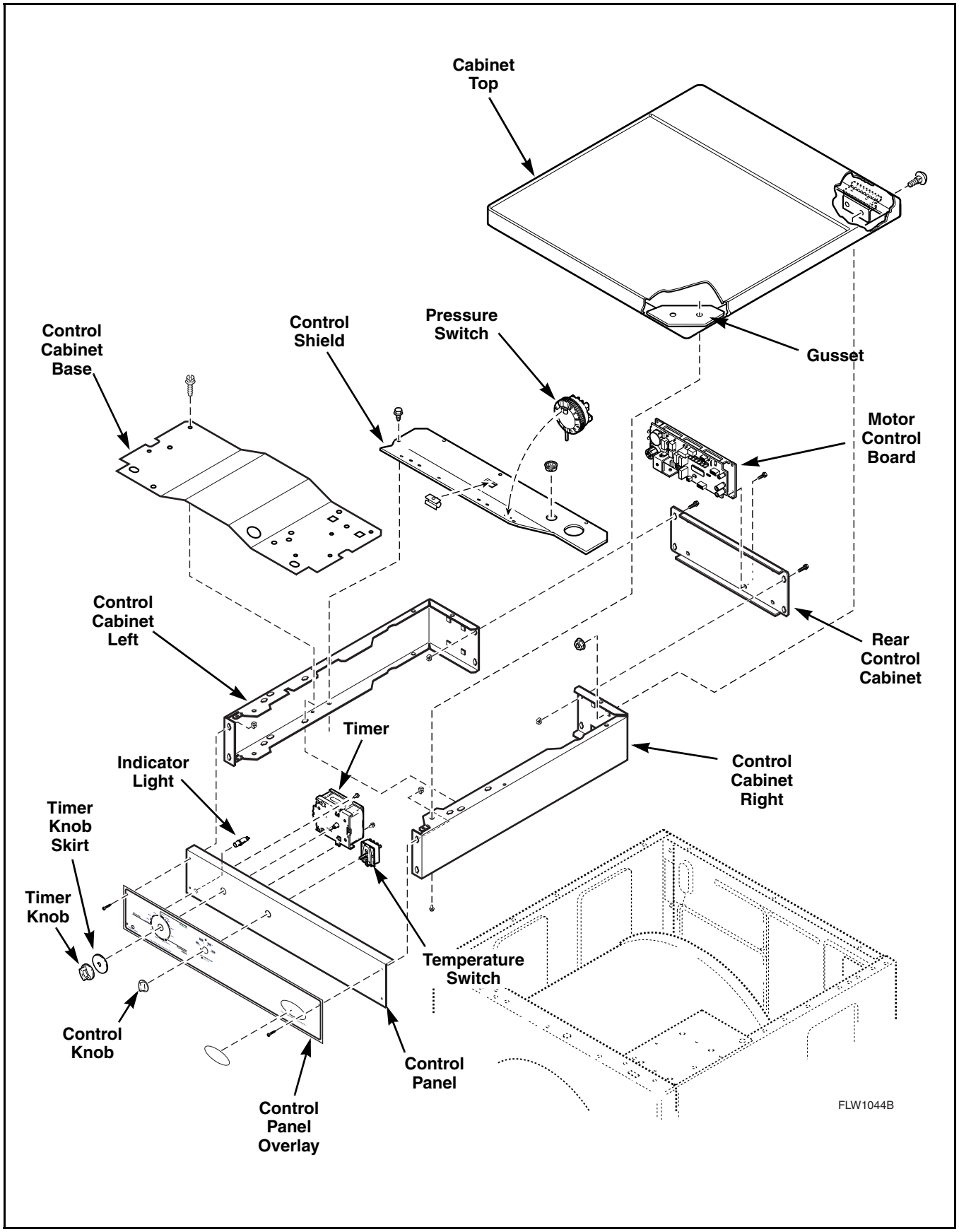

Figure 11

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WARNING

To reduce the risk of electric shock, fire, explosion, serious injury or death:
- **Disconnect electric power to the washer before servicing.**
- **Never start the washer with any guards/panels removed.**
- **Whenever ground wires are removed during servicing, these ground wires must be reconnected to ensure that the washer is properly grounded.**

W003

15. CONTROL CABINET – FRONT CONTROL WASHERS

a. Remove screws holding control panel to control cabinet. Refer to *Figure 11*. Remove panel.
b. Remove screws holding cabinet top to control cabinet. Refer to *Figure 11*.
c. If area or space permits, lift cabinet top to a vertical position.

NOTE: To avoid damage to hinges, be sure to support top with a chain (not included) or equivalent. Refer to *Figure 12*.

d. Remove cabinet top from washer by removing nuts and carriage bolts holding cabinet top and hinges to control cabinet. Refer to *Figure 12*.
e. Carefully lift cabinet top off washer and set out of the way to prevent damage.
f. Unscrew timer knob from timer shaft (right hand thread), then remove timer knob skirt. Refer to *Figure 11*.
g. Pull temperature switch knob off shaft.
h. Remove screws holding control cabinet base to control cabinet. Refer to *Figure 11*.
i. Remove screws holding control shield (with controls attached) to bottom rear flange of control cabinet. Refer to *Figure 11*.
j. Remove screws holding motor control board to rear of control cabinet. Refer to *Figure 11*.
k. Remove screws holding control cabinet to top flange of side panels. Refer to *Figure 11*.
l. Carefully lift control cabinet assembly off washer.
m. Remove screws holding left, right and rear control cabinets together. Refer to *Figure 11*.

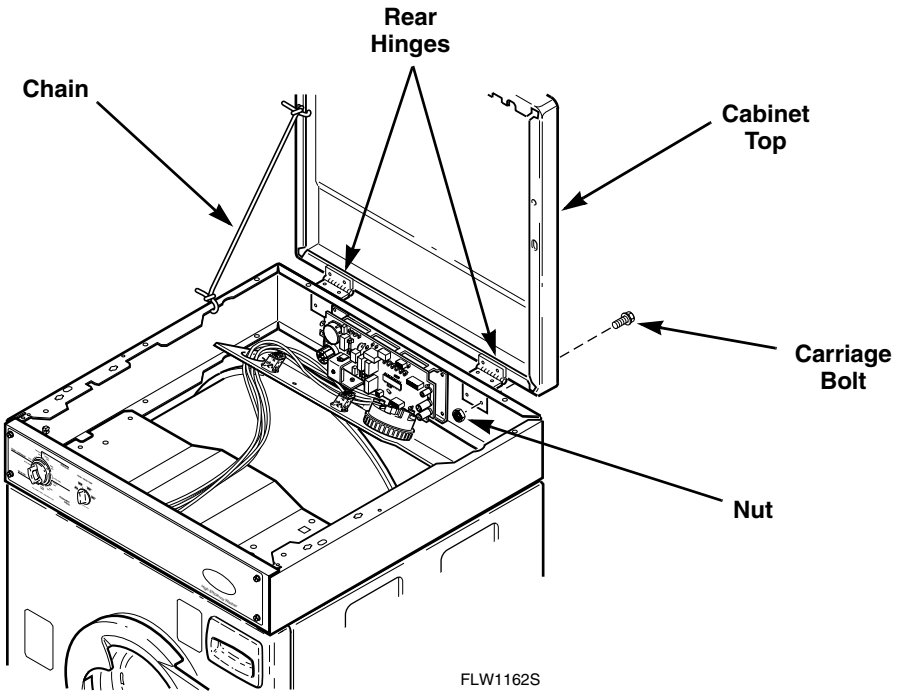

Figure 12

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WARNING

To reduce the risk of electric shock, fire, explosion, serious injury or death:
- **Disconnect electric power to the washer before servicing.**
- **Never start the washer with any guards/panels removed.**
- **Whenever ground wires are removed during servicing, these ground wires must be reconnected to ensure that the washer is properly grounded.**

W003

16. TIMER

a. **Rear Control Washers**

(1) Unscrew timer knob from timer shaft (right hand thread), then remove timer knob skirt.

(2) Remove three screws holding rear of hood assembly to control hood rear panel. Refer to *Figure 9*.

(3) Pivot hood assembly forward on cabinet top. Refer to *Figure 9*.

(4) Remove two screws holding timer to control hood mounting plate. Refer to *Figure 13*.

NOTE: DO NOT attempt to repair timer.

(5) Disengage wire harness terminal block plugs from timer by pressing in on movable locking tabs (located on each side of terminal block plug) and pulling away from timer. Refer to *Figure 13*.

IMPORTANT: To avoid an open circuit, DO NOT pull on terminal block wires when removing blocks from timer as this could damage wires or terminal crimping.

Before attaching wire harness terminal blocks to timer, make sure all male terminals on timer are straight and are capable of accepting terminals from wire harness terminal blocks.

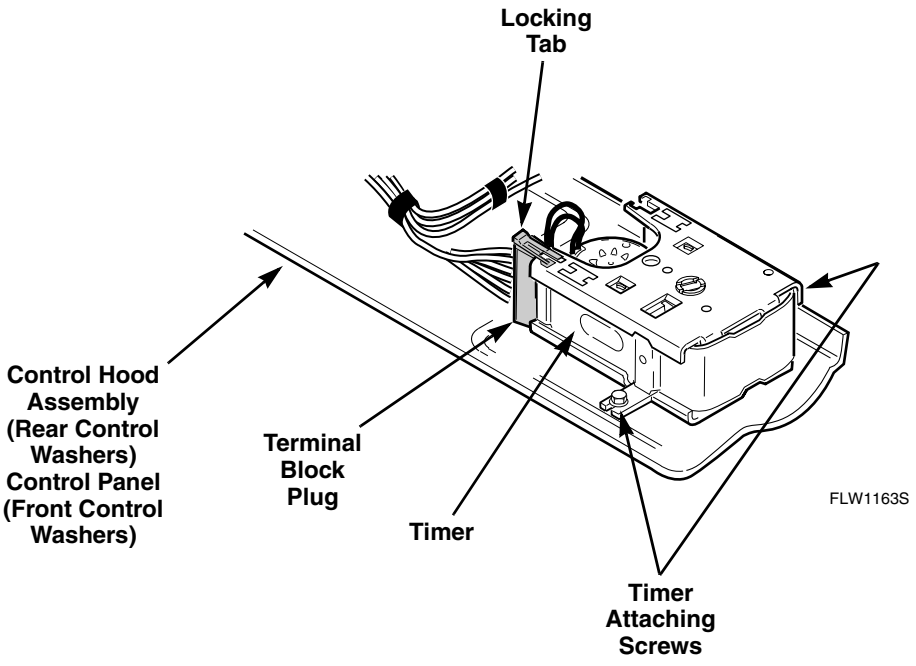

Figure 13

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WARNING

To reduce the risk of electric shock, fire, explosion, serious injury or death:
- **Disconnect electric power to the washer before servicing.**
- **Never start the washer with any guards/panels removed.**
- **Whenever ground wires are removed during servicing, these ground wires must be reconnected to ensure that the washer is properly grounded.**

W003

(6) Seat horizontal and vertical tabs on front plate of timer completely into slots on control mounting plate. Refer to *Figure 14*.
(7) Tighten attaching screws between 12 to 18 inch pounds (1.6 to 2.4 Nm).

IMPORTANT: To avoid timer damage, do not allow timer to be struck on corners, edges of frame, or on timer shaft.

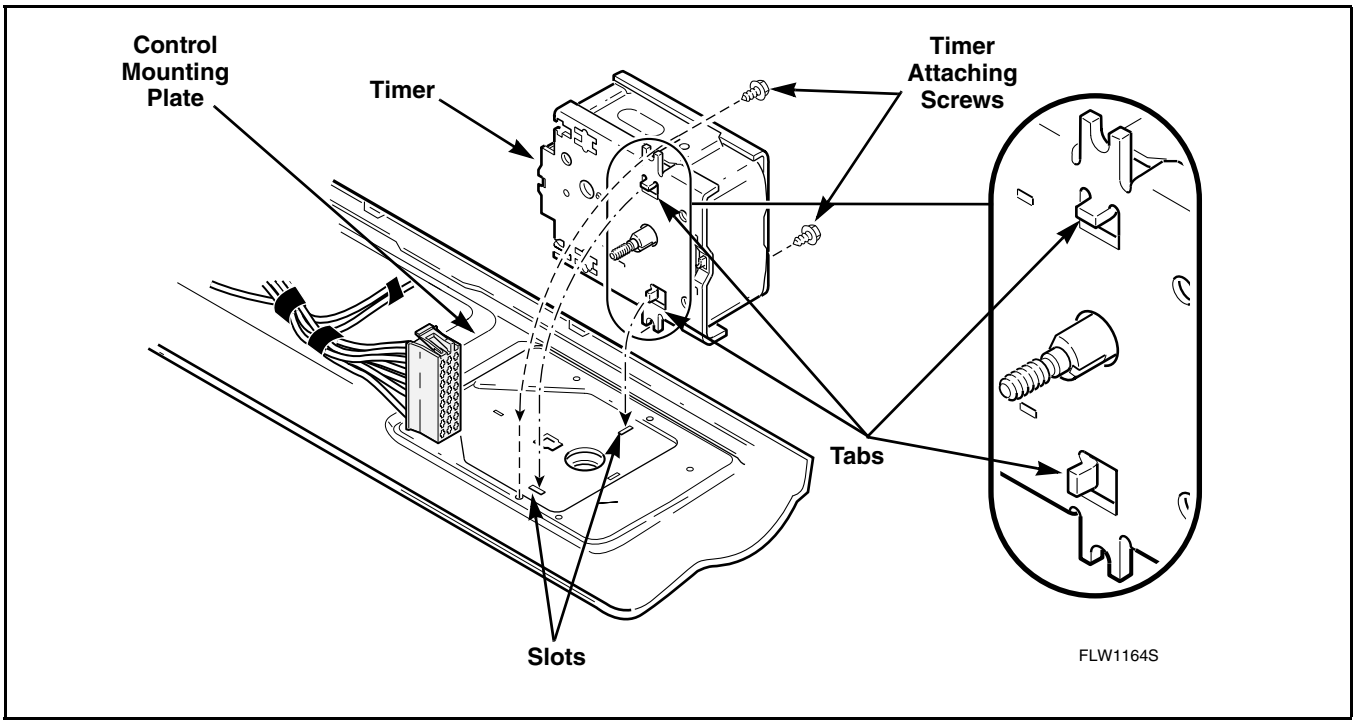

Figure 14

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WARNING

To reduce the risk of electric shock, fire, explosion, serious injury or death:
- **Disconnect electric power to the washer before servicing.**
- **Never start the washer with any guards/panels removed.**
- **Whenever ground wires are removed during servicing, these ground wires must be reconnected to ensure that the washer is properly grounded.**

W003

b. **Front Control Washers**

(1) Unscrew timer knob from timer shaft (right hand thread), then remove timer knob skirt.

(2) Remove screws holding control panel to control cabinet. Refer to *Figure 11*. Remove panel.

(3) Remove screws holding cabinet top to control cabinet. Refer to *Figure 11*.

(4) If area or space permits, lift cabinet top to a vertical position.

NOTE: To avoid damage to hinges, be sure to support top with a chain (not included) or equivalent. Refer to *Figure 12*.

(5) Remove two screws holding timer to control mounting plate. Refer to *Figure 11*.

NOTE: DO NOT attempt to repair timer.

(6) Disengage wire harness terminal block plugs from timer by pressing in on movable locking tabs (located on each side of terminal block plug) and pulling away from timer. Refer to *Figure 13*.

IMPORTANT: To avoid an open circuit, DO NOT pull on terminal block wires when removing blocks from timer as this could damage wires or terminal crimping.

Before attaching wire harness terminal blocks to timer, make sure all male terminals on timer are straight and are capable of accepting terminals from wire harness terminal blocks.

(7) Seat horizontal and vertical tabs on front plate of timer completely into slots on control mounting plate. Refer to *Figure 14*.

(8) Tighten attaching screws between 12 to 18 inch pounds (1.6 to 2.4 Nm).

IMPORTANT: To avoid timer damage, do not allow timer to be struck on corners, edges of frame, or on timer shaft.

17. TEMPERATURE SWITCH

a. **Rear Control Washers**

(1) Remove three screws holding rear of hood assembly to control hood rear panel. Refer to *Figure 9*.

(2) Pivot hood assembly forward on cabinet top. Refer to *Figure 9*.

(3) Disconnect wires from switch terminals.

NOTE: Refer to wiring diagram when rewiring switch.

(4) Refer to *Figure 10* for switch removal.

(5) Press in on two locking tabs and at the same time turn switch 1/4 turn counterclockwise to remove switch from switch bracket. Refer to *Figure 10*.

IMPORTANT: Before removing switch, note switch position in relation to switch bracket so switch can be reinstalled in same position.

NOTE: When installing switch, place switch tabs into cutout in switch bracket and turn switch clockwise to its full limit of travel, within the switch bracket opening, until both locking tabs snap into place.

b. **Front Control Washers**

(1) Remove screws holding control panel to control cabinet. Refer to *Figure 11*. Remove panel.

(2) Remove screws holding cabinet top to control cabinet. Refer to *Figure 11*.

(3) If area or space permits, lift cabinet top to a vertical position.

NOTE: To avoid damage to hinges, be sure to support top with a chain (not included) or equivalent. Refer to *Figure 12*.

(4) Disconnect wires from switch terminals.

NOTE: Refer to wiring diagram when rewiring switch.

(5) Remove screws holding temperature switch to control panel. Refer to *Figure 11*.

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WARNING

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- **Whenever ground wires are removed during servicing, these ground wires must be reconnected to ensure that the washer is properly grounded.**

W003

18. PRESSURE SWITCH

a. **Rear Control Washers**

(1) Remove three screws holding rear of hood assembly to control hood rear panel. Refer to *Figure 9*.

(2) Pivot hood assembly forward on cabinet top. Refer to *Figure 9*.

(3) Disconnect wires from pressure switch. Refer to wiring diagram when rewiring switch.

(4) Refer to *Figure 10* for switch removal.

IMPORTANT: Before connecting hose to pressure switch, blow air through pressure hose to remove any condensation that may have accumulated in hose.

b. **Front Control Washers**

(1) Remove screws holding control panel to control cabinet. Refer to *Figure 11*. Remove panel.

(2) Remove screws holding cabinet top to control cabinet. Refer to *Figure 11*.

(3) If area or space permits, lift cabinet top to a vertical position.

NOTE: To avoid damage to hinges, be sure to support top with a chain (not included) or equivalent. Refer to *Figure 12*.

(4) Disconnect wires from pressure switch. Refer to wiring diagram when rewiring switch.

(5) Refer to *Figure 11* for switch removal.

IMPORTANT: Before connecting hose to pressure switch, blow air through pressure hose to remove any condensation that may have accumulated in hose.

19. MOTOR CONTROL BOARD

a. **Rear Control Washers**

(1) Remove three screws holding rear of hood assembly to control hood rear panel. Refer to *Figure 9*.

(2) Pivot hood assembly forward on cabinet top. Refer to *Figure 9*.

(3) Disconnect harness connectors from control board.

NOTE: Refer to wiring diagram when rewiring control board.

IMPORTANT: Remove control board and metal mounting plate as a unit. Handle control board by the back metal plate. Do not contact control board with hands or metal objects. Place assembly in clean, dry area away from work area to avoid damage. Do not attempt field repair of the motor control board. Attempted repair or tampering with the control board will void its warranty.

(4) Remove four screws holding motor control board to control hood rear panel. Refer to *Figure 10*.

(5) Remove control board and place in anti-static shipping material for return to manufacturer.

IMPORTANT: It is important to take care when handling original control. It must be carefully placed in anti-static shipping material which was removed from new control. Warranty credit will not be issued if control is not wrapped properly.

b. **Front Control Washers**

(1) Remove screws holding control panel to control cabinet. Refer to *Figure 11*. Remove panel.

(2) Remove screws holding cabinet top to control cabinet. Refer to *Figure 11*.

(3) If area or space permits, lift cabinet top to a vertical position.

NOTE: To avoid damage to hinges, be sure to support top with a chain (not included) or equivalent. Refer to *Figure 12*.

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WARNING

To reduce the risk of electric shock, fire, explosion, serious injury or death:
- **Disconnect electric power to the washer before servicing.**
- **Never start the washer with any guards/panels removed.**
- **Whenever ground wires are removed during servicing, these ground wires must be reconnected to ensure that the washer is properly grounded.**

W003

(4) Disconnect harness connectors from control board.

NOTE: Refer to wiring diagram when rewiring control board.

IMPORTANT: Remove control board and metal mounting plate as a unit. Handle control board by the back metal plate. Do not contact control board with hands or metal objects. Place assembly in clean, dry area away from work area to avoid damage. Do not attempt field repair of the motor control board. Attempted repair or tampering with the control board will void its warranty.

(5) Remove four screws holding motor control board to rear control cabinet. Refer to *Figure 11*.

(6) Remove control board and place in anti-static shipping material for return to manufacturer.

IMPORTANT: It is important to take care when handling original control. It must be carefully placed in anti-static shipping material which was removed from new control. Warranty credit will not be issued if control is not wrapped properly.

20. DOOR LOCK INDICATOR LIGHT

a. **Rear Control Washers**

(1) Remove three screws holding rear of hood assembly to control hood rear panel. Refer to *Figure 9*.

(2) Pivot hood assembly forward on cabinet top. Refer to *Figure 9*.

(3) Carefully remove bottom front of hood from clips on cabinet top.

(4) Disconnect two wires from door lock indicator light.

NOTE: Refer to wiring diagram when rewiring light.

(5) Refer to *Figure 10* for light removal.

b. **Front Control Washers**

(1) Remove screws holding control panel to control cabinet. Refer to *Figure 11*. Remove panel.

(2) Remove screws holding cabinet top to control cabinet. Refer to *Figure 11*.

(3) If area or space permits, lift cabinet top to a vertical position.

NOTE: To avoid damage to hinges, be sure to support top with a chain (not included) or equivalent. Refer to *Figure 12*.

(4) Disconnect two wires from door lock indicator light.

NOTE: Refer to wiring diagram when rewiring light.

(5) Refer to *Figure 11* for light removal.

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WARNING

To reduce the risk of electric shock, fire, explosion, serious injury or death:
- **Disconnect electric power to the washer before servicing.**
- **Never start the washer with any guards/panels removed.**
- **Whenever ground wires are removed during servicing, these ground wires must be reconnected to ensure that the washer is properly grounded.**

W003

21. GRAPHIC PANEL (Control Panel Overlay)

a. **Rear Control Washers**

(1) Unscrew timer knob from timer shaft (right hand thread), then remove timer knob skirt. Refer to *Figure 10*.

(2) Pull temperature switch knob off shaft.

(3) Remove door lock light lenses. Refer to *Figure 10*.

(4) Remove three screws holding rear of hood assembly to control hood rear panel. Refer to *Figure 9*.

(5) Pivot hood assembly forward on cabinet top. Refer to *Figure 9*.

(6) Carefully remove bottom front of hood from clips on cabinet top.

(7) Disconnect wires from components and carefully remove components from control mounting plate.

NOTE: Refer to wiring diagram when rewiring component parts.

(8) Remove screws holding both end panels to control hood assembly. Refer to *Figure 10*.

(9) Bend tabs on graphic panel (located inside of control hood) straight out toward rear of hood.

(10) Carefully remove graphic panel off front of control mounting plate. Refer to *Figure 10*.

b. **Front Control Washers**

(1) Unscrew timer knob from timer shaft (right hand thread), then remove timer knob skirt. Refer to *Figure 11*.

(2) Pull temperature switch knob off shaft.

(3) Remove 4 screws holding control panel overlay to control panel. Refer to *Figure 11*.

22. LOWER ACCESS PANEL

a. While supporting the lower access panel, remove two screws from bottom edge of lower access panel. Refer to *Figure 15*.

b. Gently lower the access panel to disengage panel locators from bottom edge of front panel.

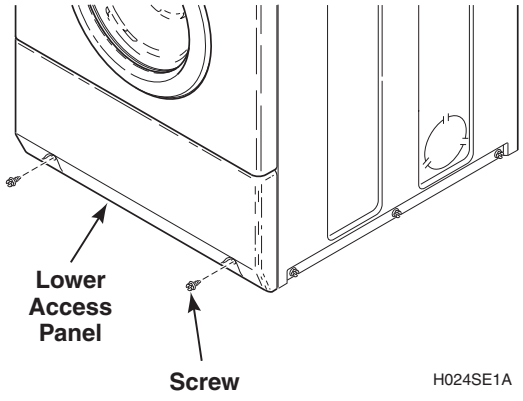

Figure 15

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WARNING

To reduce the risk of electric shock, fire, explosion, serious injury or death:
- **Disconnect electric power to the washer before servicing.**
- **Never start the washer with any guards/panels removed.**
- **Whenever ground wires are removed during servicing, these ground wires must be reconnected to ensure that the washer is properly grounded.**

W003

23. ELECTRIC DRAIN PUMP

a. While supporting the lower access panel, remove two screws from bottom edge of lower access panel. Refer to *Figure 15*.

b. Gently lower the access panel to disengage panel locators from bottom edge of front panel.

c. Loosen hose clamps and remove three hoses connected to electric drain pump (outer-tub-to-pump hose, vent hose and drain hose). Refer to *Figure 16*.

d. Remove three mounting screws holding pump to base.

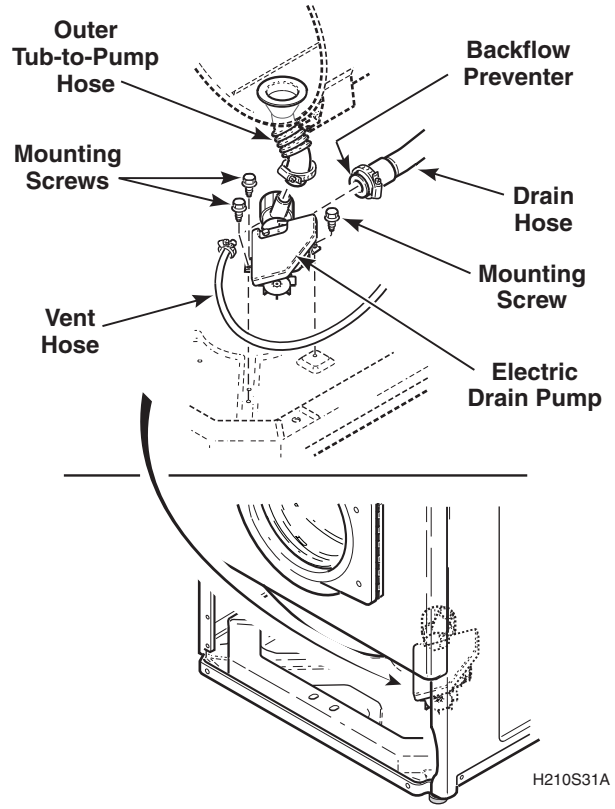

Figure 16

(continued)

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To reduce the risk of electric shock, fire, explosion, serious injury or death:
- **Disconnect electric power to the washer before servicing.**
- **Never start the washer with any guards/panels removed.**
- **Whenever ground wires are removed during servicing, these ground wires must be reconnected to ensure that the washer is properly grounded.**

W003

24. CABINET TOP ASSEMBLY

a. **Rear Control Washers**

(1) While supporting lower access panel, remove two screws from bottom edge of panel and remove panel. Refer to *Figure 15*.

(2) Using the special tool, No. 318P4, remove dispenser drawer. Refer to *Figure 20*.

(3) Open loading door. Carefully remove wire clamp ring from groove with small flat blade screwdriver. Spring is in 6 o'clock position.

NOTE: To avoid damage to spring, use screwdriver on wire clamp ring to the right or left of spring.

(4) Grasp loading door seal lip. Refer to *Figure 22*, Step 1.

NOTE: To avoid damage to door seal, DO NOT use pliers or sharp objects to grasp the door seal lip. If lip is damaged, seal will leak.

(5) Using a circular motion, pull seal up (*Figure 22*, Step 1), out (*Figure 22*, Step 2) and down (*Figure 22*, Step 3).

(6) When seal releases from lip of front panel, pull out and remove the seal from front panel around door opening. Refer to *Figure 22*, Step 4.

(7) Remove bottom two front panel attaching screws. Refer to *Figure 21*.

(8) Remove front panel (with loading door attached) away from washer as far as wires permit.

(9) Unplug wire harness from both the door latch switch and from the door switch. Refer to *Figure 23*. Remove clips holding wire harness and door seal hose along top flange of front panel and remove front panel.

(10) Remove two screws holding front of cabinet top to front flange of side panels. Refer to *Figure 17*.

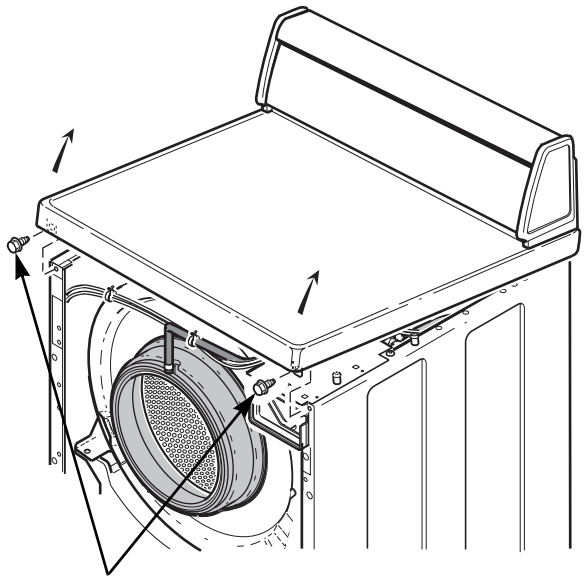

Figure 17

(11) Remove three screws holding hood assembly to control hood rear panel. Refer to *Figure 9*.

(12) Pivot hood assembly forward on cabinet top. Refer to *Figure 9*.

(13) Disconnect hose from pressure switch and push hose down through hole in cabinet top.

(14) Disconnect wire harnesses and wires.

(15) Reinstall control hood assembly.

(16) Lift front of cabinet top slightly and pull forward to disengage from rear hold down brackets.

(17) Carefully lift cabinet top off washer and set alongside the washer cabinet on protective padding.

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WARNING

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- **Never start the washer with any guards/panels removed.**
- **Whenever ground wires are removed during servicing, these ground wires must be reconnected to ensure that the washer is properly grounded.**

W003

b. **Front Control Washers**
   (1) Remove screws holding control panel to control cabinet. Refer to *Figure 11*. Remove panel.
   (2) Remove screws holding cabinet top to control cabinet. Refer to *Figure 11*.
   (3) If area or space permits, lift cabinet top to a vertical position.

NOTE: To avoid damage to hinges, be sure to support top with a chain (not included) or equivalent. Refer to *Figure 12*.

   (4) Remove cabinet top from washer by removing nuts and carriage bolts holding cabinet top and hinges to control cabinet. Refer to *Figure 12*.
   (5) Carefully lift cabinet top off washer and set out of the way to prevent damage.

25. MIXING VALVE
a. Mixing valve is located on upper back right corner of rear panel. Refer to *Figure 18*.
b. Shut off external hot and cold water supply and remove two inlet hoses.
c. Loosen hose clamp and remove mixing valve-to-dispenser hose at the mixing valve. Refer to *Figure 18*.
d. Remove wire harness disconnect blocks from mixing valve solenoid terminals. Refer to *Figure 18*.

NOTE: Refer to wiring diagram when rewiring solenoids.

e. Go to rear of washer and remove screw holding mixing valve and plate to rear panel, then remove valve and plate out through opening in rear panel. Refer to *Figure 18*.
f. Remove screws holding valve to mixing valve plate. Refer to *Figure 18*.

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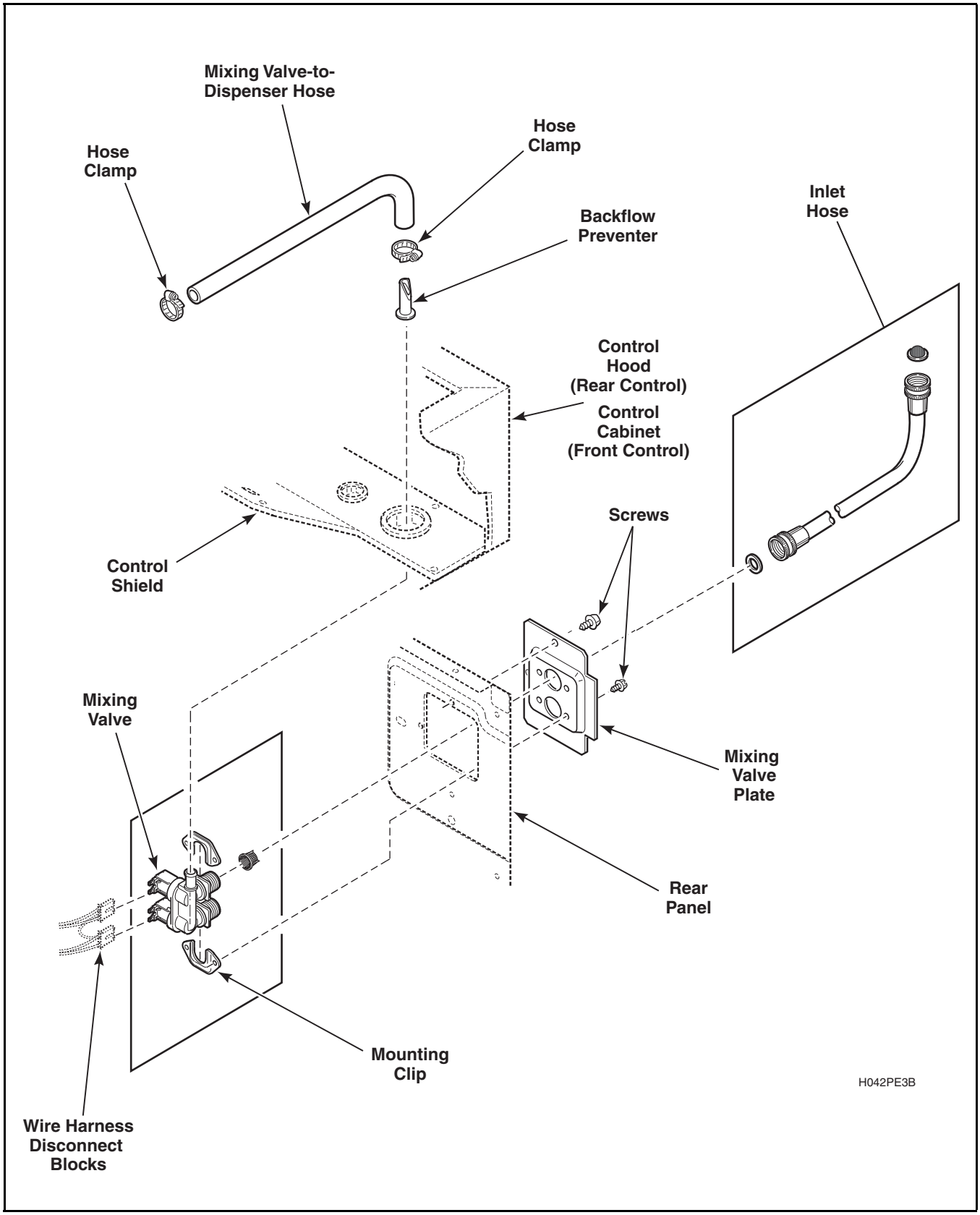

Figure 18

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WARNING

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- **Never start the washer with any guards/panels removed.**
- **Whenever ground wires are removed during servicing, these ground wires must be reconnected to ensure that the washer is properly grounded.**

W003

26. LOADING DOOR

a. Unlatch and open loading door.

b. Remove door bezel by prying inside lip up and forward with fingers. Refer to *Figure 19*.

c. While supporting loading door, remove screws, lockwashers and nuts holding loading door to hinge assembly and remove door. Refer to *Figure 19*.

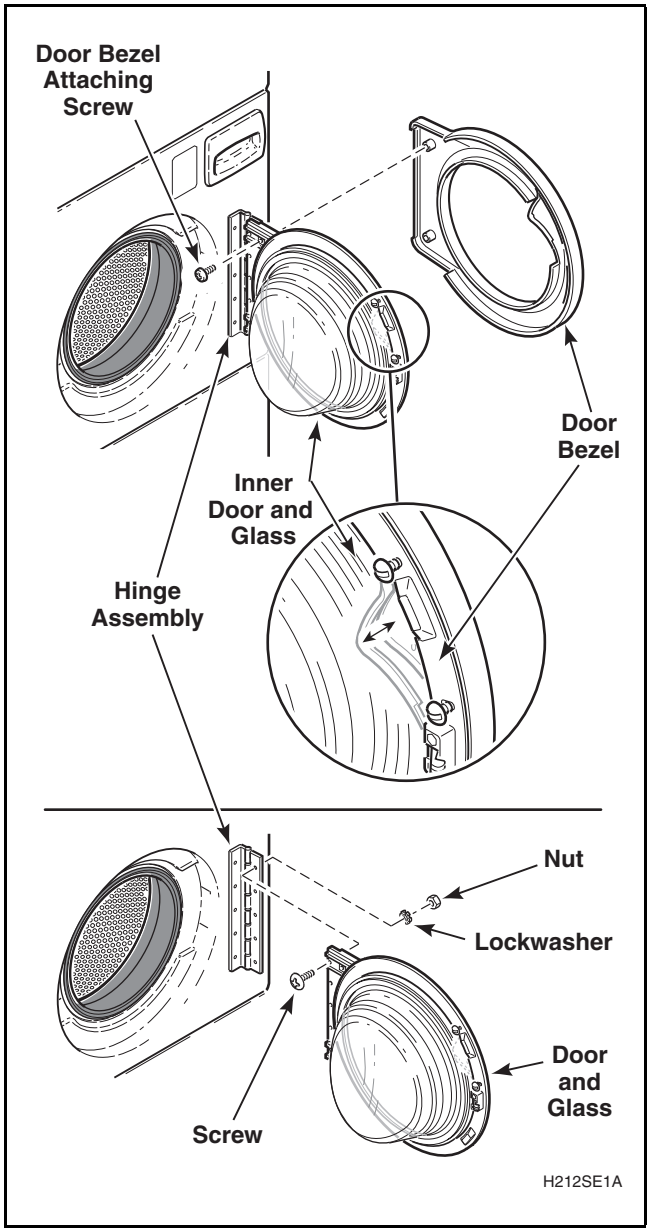

Figure 19

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WARNING

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- **Whenever ground wires are removed during servicing, these ground wires must be reconnected to ensure that the washer is properly grounded.**

W003

27. FRONT PANEL

a. **Rear Control Washers**

(1) While supporting the lower access panel, remove two screws from bottom edge of lower access panel. Refer to *Figure 15*.

(2) Gently lower the access panel to disengage panel locators from bottom edge of front panel.

(3) Using the Special Tool, No. 318P4, remove dispenser drawer. Refer to *Figure 20*.

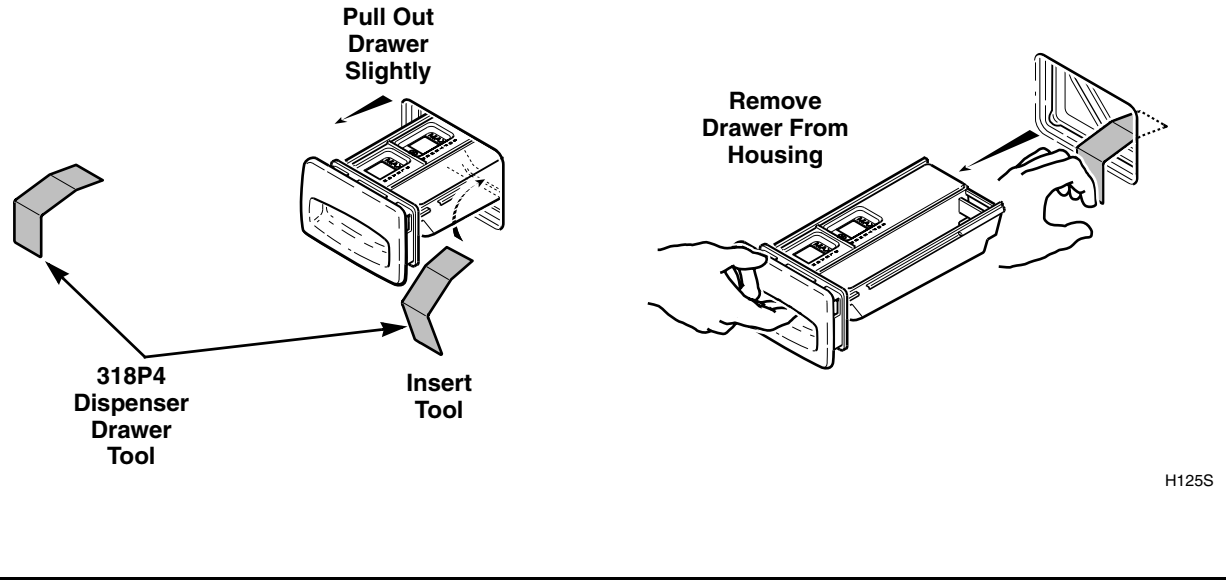

Figure 20

(4) Unplug wire harness from both the door latch switch and from the door switch. Refer to *Figure 23*. Remove clips holding wire harness and door seal hose along top flange of front panel and remove front panel.

NOTE: Door seal hose and wire harness must be reinstalled in the appropriate clips and holes along top flange of front panel. Refer to *Figure 21*.

(5) Open loading door. Carefully remove wire clamp ring from groove with small flat screwdriver. Spring is in 6 o'clock position.

NOTE: To avoid damage to spring, use screwdriver on wire clamp ring to the right or left of spring.

(6) Grasp loading door seal lip. Refer to *Figure 22*, Step 1.

NOTE: To avoid damage to door seal, DO NOT use pliers or sharp objects to grasp the door seal lip. If lip is damaged, seal will leak.

(7) Using a circular motion, pull seal up (*Figure 22*, Step 1), out (*Figure 22*, Step 2) and down (*Figure 22*, Step 3).

(8) When seal releases from lip of front panel, pull out and remove the seal. Refer to *Figure 22*, Step 4.

NOTE: The ease of installation of the loading door seal can be improved using water or 409 lubricant to work seal around circumference of loading door. Be sure to orientate seal with the white arrow in the 12 o'clock position when installing the wire clamp ring to front panel. Be careful not to overstretch tension spring.

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WARNING

To reduce the risk of electric shock, fire, explosion, serious injury or death:
- **Disconnect electric power to the washer before servicing.**
- **Never start the washer with any guards/panels removed.**
- **Whenever ground wires are removed during servicing, these ground wires must be reconnected to ensure that the washer is properly grounded.**

W003

(9) While supporting front panel, remove two bottom front corner screws. Refer to *Figure 21*. Remove front panel (with loading door attached) away from washer as far as wires permit.

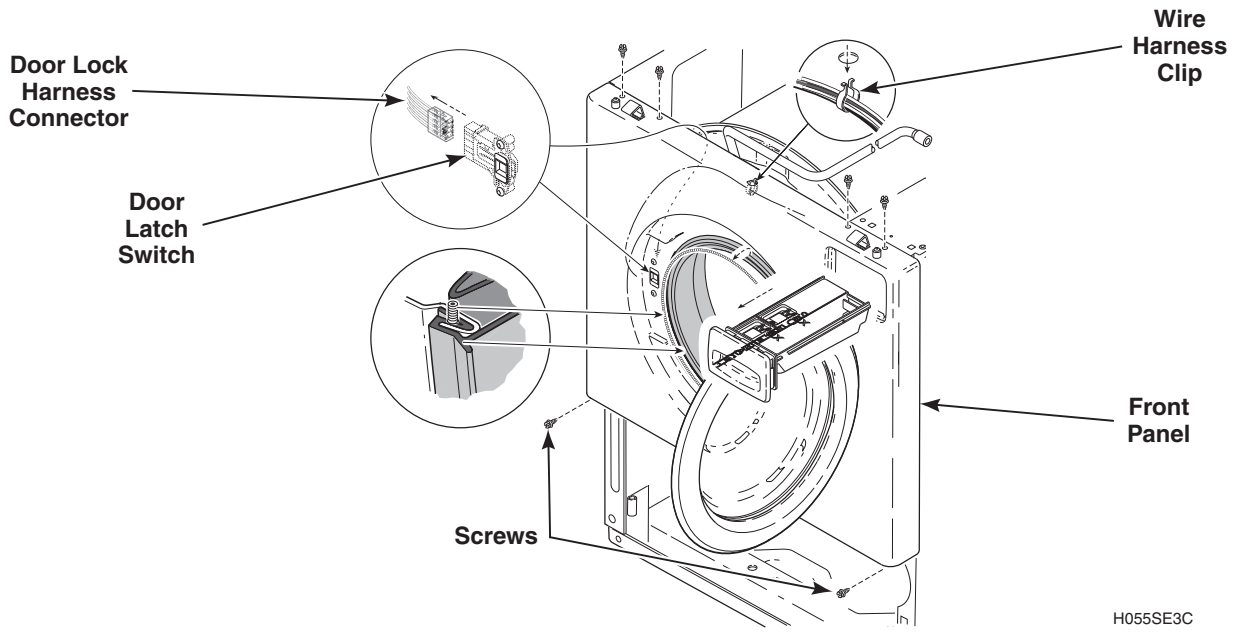

Figure 21

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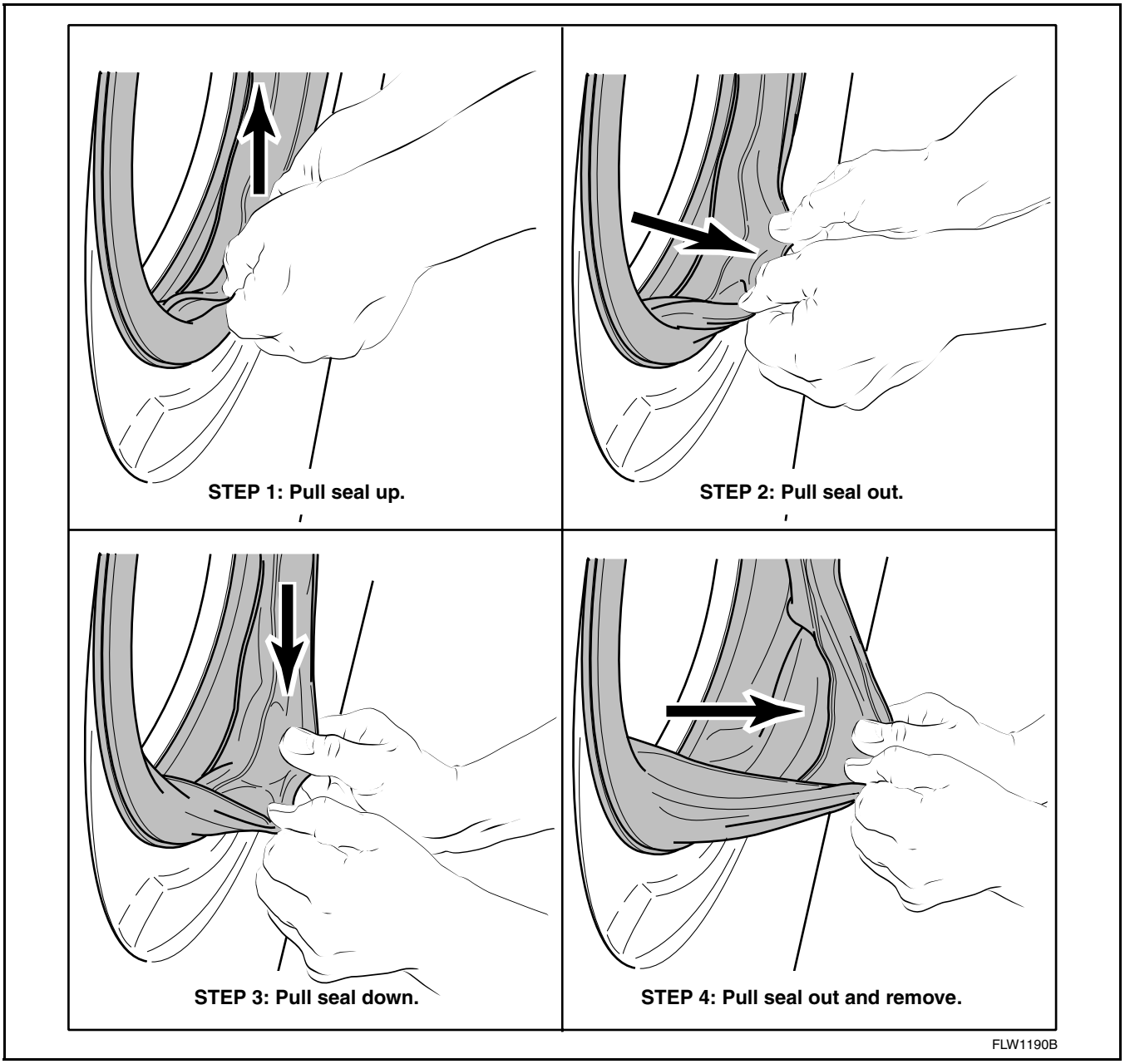

Figure 22

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WARNING

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- **Whenever ground wires are removed during servicing, these ground wires must be reconnected to ensure that the washer is properly grounded.**

W003

b. **Front Control Washers**

(1) While supporting the lower access panel, remove two screws from bottom edge of lower access panel. Refer to *Figure 15*.

(2) Gently lower the access panel to disengage panel locators from bottom edge of front panel.

(3) Unscrew timer knob from timer shaft (right hand thread), then remove timer knob skirt. Refer to *Figure 11*.

(4) Pull temperature switch knob off shaft.

(5) Remove screws holding control panel to control cabinet. Refer to *Figure 11*. Remove panel.

(6) Remove scews holding cabinet top to control cabinet. Refer to *Figure 11*.

(7) If area or space permits, lift cabinet top to a vertical position.

NOTE: To avoid damage to hinges, be sure to support top with a chain (not included) or equivalent. Refer to *Figure 12*.

(8) Remove cabinet top from washer by removing nuts and carriage bolts holding cabinet top and hinges to control cabinet. Refer to *Figure 12*.

(9) Carefully lift cabinet top off washer and set out of the way to prevent damage.

(10) Remove screws holding control cabinet base to control cabinet. Refer to *Figure 11*.

(11) Remove screws holding control shield (with controls attached) to bottom rear flange of control cabinet. Refer to *Figure 11*.

(12) Remove screws holding motor control board to rear control cabinet. Refer to *Figure 11*.

(13) Remove screws holding control cabinet to top flange of side panels.

(14) Carefully lift control cabinet assembly off washer.

(15) Using the Special Tool, No. 318P4, remove dispenser drawer. Refer to *Figure 20*.

(16) Remove two screws on top right side of front panel (above dispenser drawer), top left two screws and then bottom two front corner screws. Refer to *Figure 21*.

(17) Unplug wire harness from both the door latch switch and from the door switch. Refer to *Figure 21*. Remove clips holding wire harness and door seal hose along top flange of front panel and remove front panel.

NOTE: Door seal hose and wire harness must be reinstalled in the appropriate clips and holes along top flange of front panel. Refer to *Figure 21*.

(18) Open loading door. Carefully remove wire clamp ring from groove with small flat screwdriver. Spring is in 6 o'clock position.

NOTE: To avoid damage to spring, use screwdriver on wire clamp ring to the right or left of spring.

(19) Grasp loading door seal lip. Refer to *Figure 22*, Step 1.

NOTE: To avoid damage to door seal, DO NOT use pliers or sharp objects to grasp the door seal lip. If lip is damaged, seal will leak.

(20) Using a circular motion, pull seal up (*Figure 22*, Step 1), out (*Figure 22*, Step 2) and down (*Figure 22*, Step 3).

(21) When seal releases from lip of front panel, pull out and remove the seal. Refer to *Figure 22*, Step 4.

NOTE: The ease of installation of the loading door seal can be improved using water or 409 lubricant to work seal around circumference of loading door. Be sure to orientate seal with the white arrow in the 12 o'clock position when installing the wire clamp ring to front panel. Be careful not to overstretch tension spring.

(22) Remove front panel (with loading door attached) away from washer as far as wires permit.

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- **Disconnect electric power to the washer before servicing.**
- **Never start the washer with any guards/panels removed.**
- **Whenever ground wires are removed during servicing, these ground wires must be reconnected to ensure that the washer is properly grounded.**

W003

28. DOOR SEAL AND HOSE ASSEMBLY

a. **Front Control Washers**

(1) Unscrew timer knob from timer shaft (right hand thread), then remove timer knob skirt. Refer to *Figure 11*.

(2) Pull temperature switch knob off shaft.

(3) Remove screws holding control panel to control cabinet. Refer to *Figure 11*. Remove panel.

(4) Remove scews holding cabinet top to control cabinet. Refer to *Figure 11*.

(5) If area or space permits, lift cabinet top to a vertical position.

NOTE: To avoid damage to hinges, be sure to support top with a chain (not included) or equivalent. Refer to *Figure 12*.

(6) Remove cabinet top from washer by removing nuts and carriage bolts holding cabinet top and hinges to control cabinet. Refer to *Figure 12*.

(7) Carefully lift cabinet top off washer and set out of the way to prevent damage.

(8) Remove screws holding control cabinet base to control cabinet. Refer to *Figure 11*.

(9) Remove screws holding control shield (with controls attached) to bottom rear flange of control cabinet. Refer to *Figure 11*.

(10) Remove screws holding motor control board to rear control cabinet. Refer to *Figure 11*.

(11) Remove screws holding control cabinet to top flange of side panels. Refer to *Figure 11*.

(12) Carefully lift control cabinet assembly off washer.

b. While supporting lower front access panel, remove two screws from bottom edge of panel and remove panel. Refer to *Figure 15*.

c. Using the special tool, No. 318P4, remove dispenser drawer. Refer to *Figure 20*.

d. Open loading door. Carefully remove wire clamp ring from groove with small flat blade screwdriver. Spring is in the 6 o'clock position.

NOTE: To avoid damage to spring, use screwdriver on wire clamp ring to the right or left of spring.

e. Grasp loading door seal lip. Refer to *Figure 22*, Step 1.

NOTE: To avoid damage to door seal, DO NOT use pliers or sharp objects to grasp the door seal lip. If lip is damaged, seal will leak.

f. Using a circular motion, pull seal up (*Figure 22*, Step 1), out (*Figure 22*, Step 2) and down (*Figure 22*, Step 3).

g. When seal releases from lip of front panel, pull out and remove the seal. Refer to *Figure 22*, Step 4.

h. While supporting the front panel assembly, remove the two bottom front corner screws. Refer to *Figure 21*. Remove front panel (with loading door attached) away from washer as far as wires permit.

i. Unplug wire harness from both the door latch switch and from the door switch. Refer to *Figure 23*. Remove clips holding wire harness and door seal hose along top flange of front panel and remove front panel.

NOTE: The large wire clip holds both the wire harnesses and the door seal hose. Refer to *Figure 22*.

j. Loosen hose clamp and remove dispenser valve-to-door seal hose connection at the dispenser. Refer to *Figure 23*.

IMPORTANT: When installing door seal hose, pull hose tie tight to prevent damage. Refer to *Figure 23*.

k. Loosen large clamp holding door seal to front of outer tub. Carefully pull seal off front lip of outer tub front panel and remove door seal and hose. Refer to *Figure 23*.

NOTE: The ease of installation of loading door seal can be improved using water or 409 lubricant to work seal around the circumference of loading door. Be sure to orientate seal with white arrow in the 12 o'clock position when installing wire clamp ring to the front panel. Be careful not to overstretch tension spring

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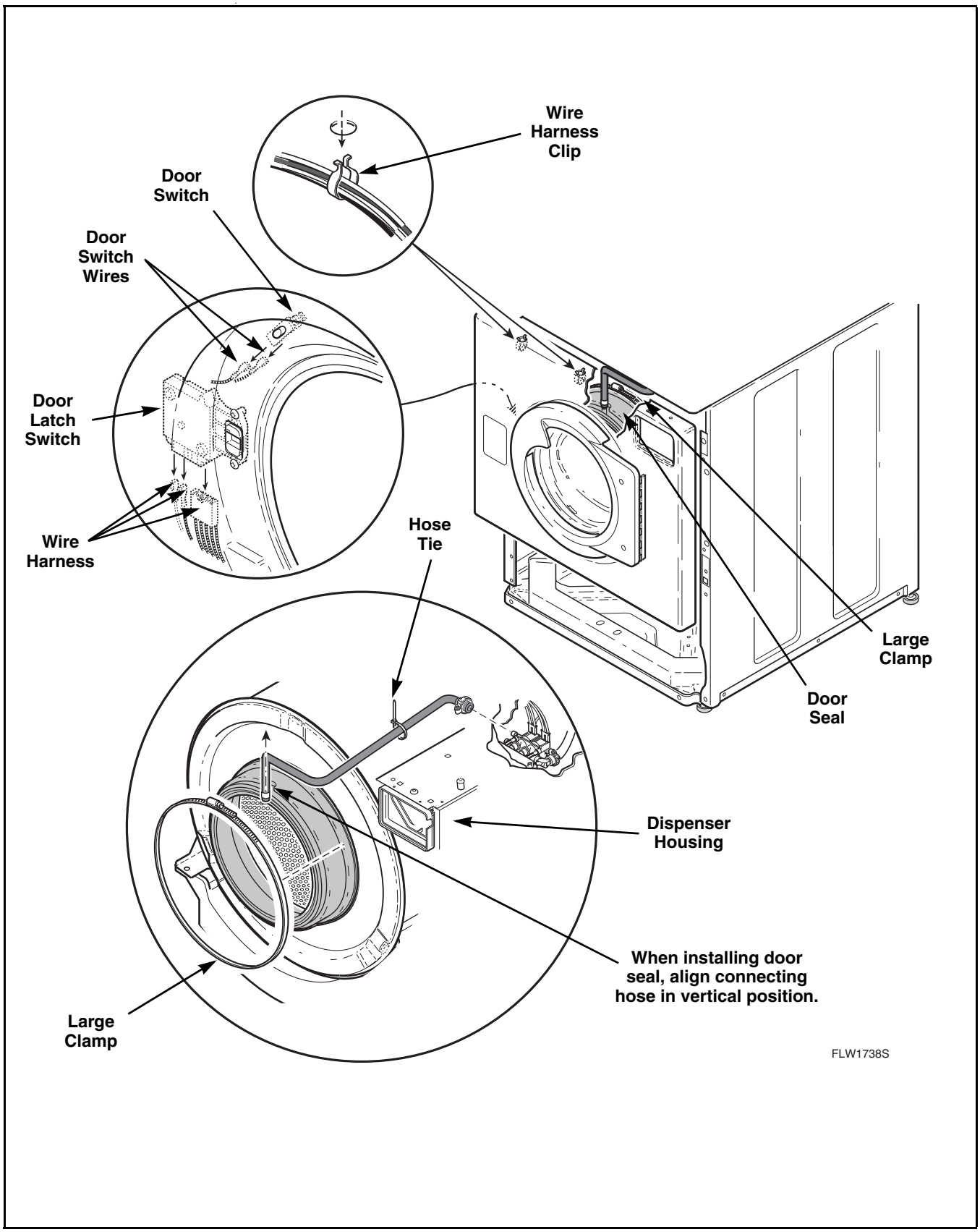

Figure 23

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- **Whenever ground wires are removed during servicing, these ground wires must be reconnected to ensure that the washer is properly grounded.**

W003

29. DOOR SWITCH

a. Open loading door.
b. Carefully remove wire clamp ring from groove with small flat blade screwdriver. Spring is located in the 6 o'clock position.

NOTE: To avoid damage to spring, use screwdriver on wire clamp ring to the right or left of spring.

c. Grasp loading door seal lip. Refer to *Figure 22*, Step 1.

NOTE: To avoid damage to door seal, DO NOT use pliers or sharp objects to grasp the door seal lip. If lip is damaged, seal will leak.

d. Using a circular motion, pull seal up (*Figure 22*, Step 1), out (*Figure 22*, Step 2) and down (*Figure 22*, Step 3).
e. When seal releases from lip of front panel, pull out and remove the seal. Refer to *Figure 22*, Step 4.
f. Reach up between door seal and front panel. Refer to *Figure 23*. Press in on switch locking tabs and push switch out through front panel only far enough to allow removal of wires from switch terminals.

IMPORTANT: Refer to wiring diagram when rewiring switch.

30. DOOR LATCH SWITCH

a. Open loading door.
b. Carefully remove wire clamp ring from groove with small flat blade screwdriver. Spring is located in the 6 o'clock position.

NOTE: To avoid damage to spring, use screwdriver on wire clamp ring to the right or left of spring.

c. Grasp loading door seal lip. Refer to *Figure 22*, Step 1.

NOTE: To avoid damage to door seal, DO NOT use pliers or sharp objects to grasp the door seal lip. If lip is damaged, seal will leak.

d. Using a circular motion, pull seal up (*Figure 22*, Step 1), out (*Figure 22*, Step 2) and down (*Figure 22*, Step 3).
e. When seal releases from lip of front panel, pull out and remove the seal. Refer to *Figure 22*, Step 4.
f. While supporting door lock from the back (through door opening), remove two Phillips head screws holding door latch switch to front panel. Refer to *Figure 23*.
g. Gently pull door lock out through door opening. Remove door lock only far enough to disconnect harness connector from door lock. Refer to *Figure 23*.

NOTE: When installing new door lock, be sure to install small lip through mounting hole first and then rotate lock into position.

31. INNER BASKET PULLEY

a. While supporting lower access panel, remove two screws from bottom edge of lower access panel and remove panel. Refer to *Figure 15*.
b. Using the special tool, No. 318P4, remove dispenser drawer. Refer to *Figure 20*.
c. Open loading door, carefully remove wire clamp ring from groove with small flat blade screwdriver. Spring is located at 6 o'clock position.

NOTE: To avoid damage to spring, use screwdriver on wire clamp ring to right or left of spring.

d. Grasp loading door seal lip. Refer to *Figure 22*, Step 1.

NOTE: To avoid damage to door seal, DO NOT use pliers or sharp objects to grasp the door seal lip. If lip is damaged, seal will leak.

e. Using a circular motion, pull seal up (*Figure 22*, Step 1), out (*Figure 22*, Step 2), and down (*Figure 22*, Step 3).
f. When seal releases from lip of front panel, pull out and remove the seal from front panel around door opening. Refer to *Figure 22*, Step 4.

NOTE: Door seal installation can be improved using water to soap solution to work seal around circumference of loading door opening. Be sure to install seal with the tab in the 12 o'clock position.

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- **Whenever ground wires are removed during servicing, these ground wires must be reconnected to ensure that the washer is properly grounded.**

W003

When installing wire clamp ring to front panel, be careful not to overstretch tension spring.

g. While supporting the front panel assembly, remove the two bottom front corner screws. Remove front panel (with loading door attached) away from washer as far as wires permit.
h. Unplug wire harness from both the door latch switch and from the door switch. Refer to *Figure 23*. Remove clips holding wire harness and door seal hose along top flange of front panel and remove front panel.

NOTE: The large wire clip holds both the wire harnesses and the door seal hose. *Refer to Figure 23*.

i. **Rear Control Washers**
   (1) Remove two screws holding cabinet top to front flange of side panels. Refer to *Figure 17*.
   (2) If area or space permits, lift cabinet top to a vertical position by hinging it on the rear hinges.

NOTE: To avoid hinge damage, be sure to support cabinet top with a small chain or something similar. Refer to *Figure 12*.

j. **Front Control Washers**
   (1) Unscrew timer knob from timer shaft (right hand thread), then remove timer knob skirt. Refer to *Figure 11*.
   (2) Pull temperature switch knob off shaft.
   (3) Remove screws holding control panel to control cabinet. Refer to *Figure 11*.
   (4) Remove screws holding cabinet top to control cabinet. Refer to *Figure 11*.
   (5) If area or space permits, lift cabinet top to a vertical position.

NOTE: To avoid damage to hinges, be sure to support top with a chain (not included) or equivalent. Refer to *Figure 12*.

   (6) Remove cabinet top from washer by removing nuts and carriage bolts holding cabinet top and hinges to control cabinet. Refer to *Figure 12*.
   (7) Carefully lift cabinet top off washer and set out of the way to prevent damage.
   (8) Remove screws holding control cabinet base to control cabinet. Refer to *Figure 11*.
   (9) Remove screws holding control shield (with controls attached) to bottom rear flange of control cabinet. Refer to *Figure 11*.
   (10) Remove screws holding motor control board to rear control cabinet. Refer to *Figure 11*.
   (11) Remove screws holding control cabinet to top flange of side panels.
   (12) Carefully lift control cabinet assembly off washer.
k. Run belt off pulley while slowly turning pulley.
l. Remove belt from motor shaft.
m. Remove cap screw **(left hand thread)**, lockwasher and flat washer holding pulley to the inner basket shaft. Refer to *Figure 24*.
n. Remove pulley from shaft.

IMPORTANT: When installing pulley, always use a new cap screw to prevent screw from loosening during operation. Refer to 800400 Parts manual for correct part number of cap screw.

NOTE: When installing new cap screw, apply a thread locking compound to screw threads and torque new cap screw to 240 minimum to 260 maximum inch pounds (27.5 to 29.7 Nm).

o. After installing belt, adjust belt tension as follows:
   (1) Working through the access door opening, place a locking pliers on the metal rod and loosen the two adjusting bolts. Refer to *Figure 25*. Repeat procedure to loosen the 2 pivot bolts. Refer to *Figure 25*.

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- **Whenever ground wires are removed during servicing, these ground wires must be reconnected to ensure that the washer is properly grounded.**

W003

(2) Pull down on motor to increase belt tension. Use a Burroughs belt gauge to obtain proper tension. Proper belt tension is obtained when belt can be deflected approximately 1/4 inch (6.35 mm) from normal position when moderate pressure 50 to 60 pounds (22.68 to 27.22 Kg) is applied to a point midway between pulleys. Refer to *Figure 25*.

(3) After proper belt tension has been obtained, tighten belt adjusting bolts firmly, then tighten pivot bolts. Refer to *Figure 25*.

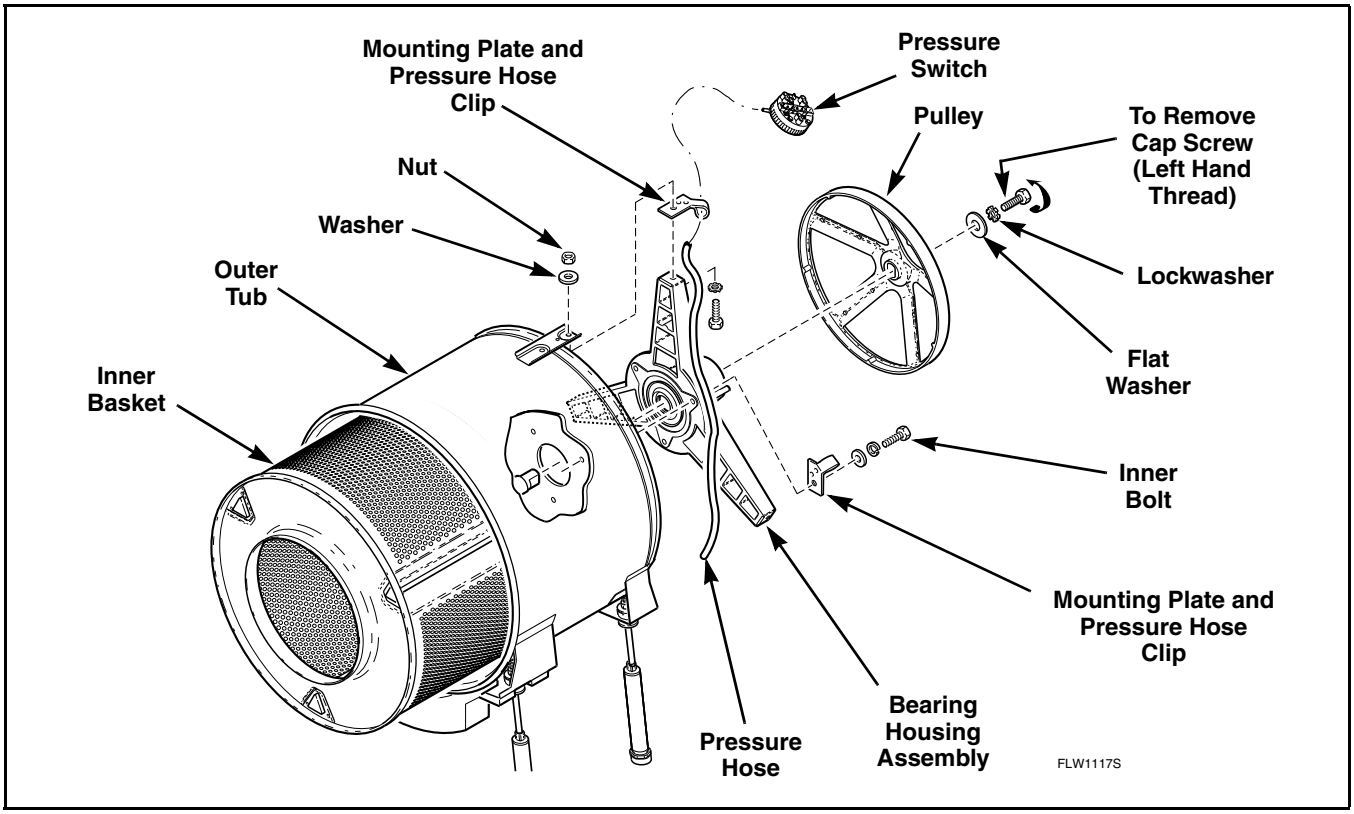

Figure 24

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WARNING

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W003

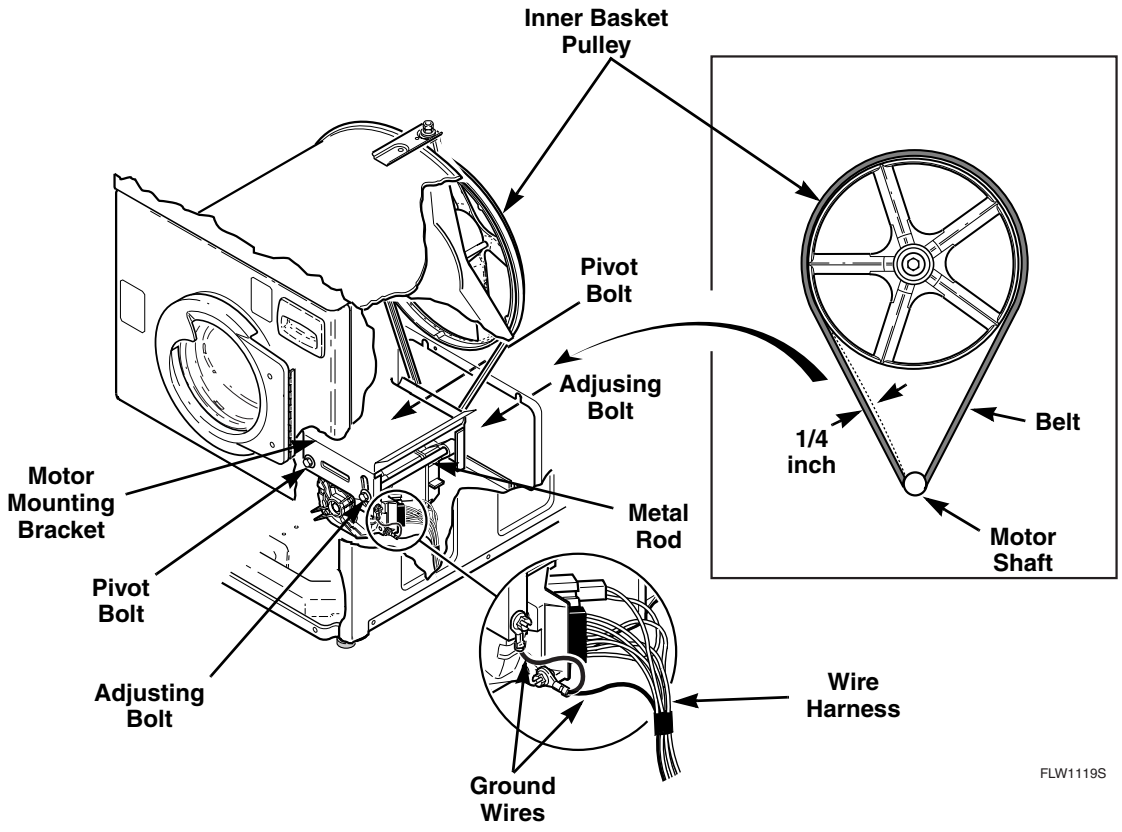

Figure 25

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WARNING

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- **Never start the washer with any guards/panels removed.**
- **Whenever ground wires are removed during servicing, these ground wires must be reconnected to ensure that the washer is properly grounded.**

W003

32. OUTER TUB FRONT PANEL

a. While supporting lower front access panel, remove two screws from bottom edge of panel and remove panel. Refer to *Figure 15*.

b. Using the special tool, No. 318P4, remove dispenser drawer. Refer to *Figure 20*.

c. Open loading door, carefully remove wire clamp ring from groove with small flat blade screwdriver. Spring is located at 6 o'clock position.

NOTE: To avoid damage to spring, use screwdriver on wire clamp ring to the right or left of spring.

d. Grasp loading door seal lip. Refer to *Figure 22*, Step 1.

NOTE: To avoid damage to door seal, DO NOT use pliers or sharp objects to grasp the door seal lip. If lip is damaged, seal will leak.

e. Using a circular motion, pull seal up (*Figure 22*, Step 1), out (*Figure 22*, Step 2) and down (*Figure 22*, Step 3).

f. When seal releases from lip of front panel, pull out and remove the seal. Refer to *Figure 22*, Step 4.

NOTE: Door seal installation can be improved using water to soap solution to work seal around circumference of loading door opening. Be sure to install seal with the tab in the 12 o'clock position. When installing wire clamp ring to front panel, be careful not to overstretch tension spring.

g. While supporting the front panel assembly, remove the two bottom front corner screws. Refer to *Figure 23*. Remove front panel (with loading door attached) away from washer as far as wires permit.

h. Unplug wire harness from both the door latch switch and from the door switch. Refer to *Figure 23*. Remove clips holding wire harness and door seal hose along top flange of front panel and remove front panel.

NOTE: The large wire clip holds both the wire harnesses and the door seal hose.

i. Loosen hose clamp and remove dispenser valve-to-door seal hose connection at the dispenser. Refer to *Figure 23*.

IMPORTANT: When installing door seal hose, pull hose tie tight to prevent damage. Refer to *Figure 23*.

j. Loosen large clamp holding door seal to front of outer tub. Carefully pull seal off front lip of outer tub front panel and remove door seal and hose. Refer to *Figure 23*.

NOTE: Door seal installation can be improved using water or soap solution to work seal around circumference of loading door opening. Be sure to install seal with the tab in the 12 o'clock position.

k. Disconnect ground wire from outer tub front panel. Refer to *Figure 26*.

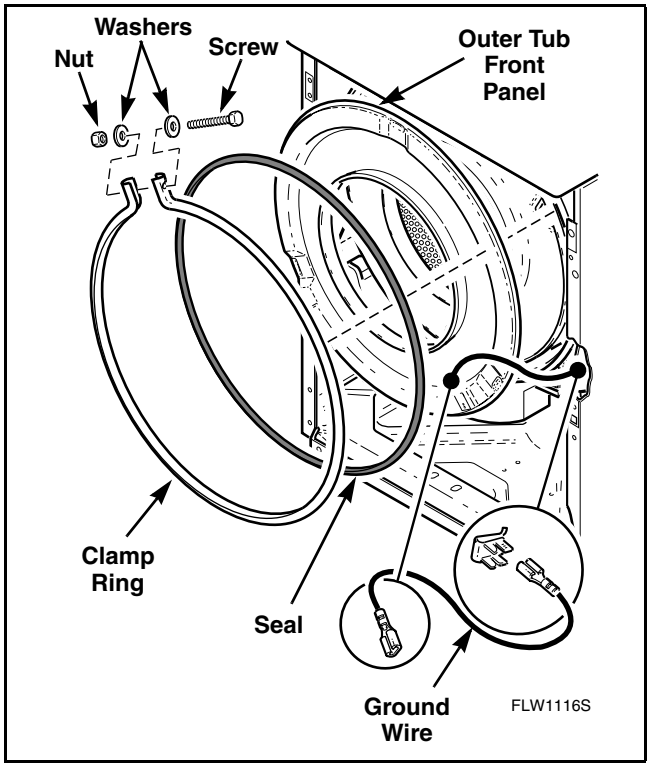

Figure 26

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WARNING

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- **Disconnect electric power to the washer before servicing.**
- **Never start the washer with any guards/panels removed.**
- **Whenever ground wires are removed during servicing, these ground wires must be reconnected to ensure that the washer is properly grounded.**

W003

l. Remove nut, washers and screw holding clamp ring to outer tub front panel. Refer to *Figure 26*.
m. Remove rubber seal from outer tub front panel and discard seal.

IMPORTANT: Always replace seal with a new seal. Spray or apply a mixture of diluted laundry detergent to assist in installation of new seal. The "puffy" side of seal should be installed to the inside. For best results, tap clamp ring all around while tightening screw and nut.

NOTE: Install metal clamp ring by placing clamp ring opening at approximately the 10 o'clock position to ensure that no interference is encountered with side panel or the underside of the control cabinet or cabinet top. Tighten the clamp ring screw and nut until a spacing of 1 inch is achieved at the clamp ring opening or until tight.

33. INNER BASKET ASSEMBLY
Inner Basket Removal

a. While supporting lower access panel, remove two screws from bottom edge of lower access panel and remove panel. Refer to *Figure 15*.
b. Using the special tool, No. 318P4, remove dispenser drawer. Refer to *Figure 20*.
c. Open loading door. Carefully remove wire clamp ring from groove with small flat screwdriver. Spring is in the 6 o'clock position.

NOTE: To avoid damage to spring, use screwdriver on wire clamp ring to the right or left of spring.

d. Grasp loading door seal lip. Refer to *Figure 22*, Step 1.

NOTE: To avoid damage to door seal, DO NOT use pliers or sharp objects to grasp the door seal lip. If lip is damaged, seal will leak.

e. Using a circular motion, pull seal up (*Figure 22*, Step 1), out (*Figure 22*, Step 2) and down (*Figure 22*, Step 3).
f. When seal releases from lip of front panel, pull out and remove the seal. Refer to *Figure 22*, Step 4.
g. Disconnect door lock harness connector and wire harness clip. Refer to *Figure 23*.
h. Remove front panel with loading door attached.
i. **Rear Control Washers**
   (1) Remove two screws holding cabinet top to front flange of side panels.
   (2) If area or space permits, lift cabinet top to a vertical position by hinging it on rear hinges.
j. **Front Control Washers**
   (1) Unscrew timer knob from timer shaft (right hand thread), then remove timer knob skirt. Refer to *Figure 11*.
   (2) Pull temperature switch knob off shaft.
   (3) Remove screws holding control panel to control cabinet. Refer to *Figure 11*. Remove panel.
   (4) Remove screws holding cabinet top to control cabinet. Refer to *Figure 11*.
   (5) If area or space permits, lift cabinet top to a vertical position.

NOTE: To avoid damage to hinges, be sure to support top with a chain (not included) or equivalent. Refer to *Figure 12*.

   (6) Remove cabinet top from washer by removing nuts and carriage bolts holding cabinet top and hinges to control cabinet. Refer to *Figure 12*.
   (7) Carefully lift cabinet top off washer and set out of the way to prevent damage.
   (8) Remove screws holding control cabinet base to control cabinet. Refer to *Figure 11*.
   (9) Remove screws holding control shield (with controls attached) to bottom rear flange of control cabinet. Refer to *Figure 11*.
   (10) Remove screws holding motor control board to rear control cabinet. Refer to *Figure 11*.
   (11) Remove screws holding control cabinet to top flange of side panels.
   (12) Carefully lift control cabinet assembly off washer.

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WARNING

To reduce the risk of electric shock, fire, explosion, serious injury or death:
- **Disconnect electric power to the washer before servicing.**
- **Never start the washer with any guards/panels removed.**
- **Whenever ground wires are removed during servicing, these ground wires must be reconnected to ensure that the washer is properly grounded.**

W003

k. Run belt off pulley while slowly turning pulley.
l. Remove belt from motor shaft.
m. Remove cap screw **(left hand thread)**, lockwasher and flat washer holding pulley to inner basket shaft. Refer to *Figure 24*.
n. Remove pulley front shaft.

IMPORTANT: When installing pulley, always use a new cap screw to prevent screw from loosening during operation. Refer to 800400 Parts manual for correct part number of cap screw.

NOTE: When installing new cap screw, apply a thread locking compound to screw threads and torque new cap screw to 240 minimum to 260 maximum inch pounds (27.5 to 29.7 Nm).

o. Working through dispenser end, remove seal dispenser valve-to-door seal hose connection at door assembly. Refer to *Figure 23*.

IMPORTANT: When installing door seal hose, pull hose tie tight to prevent damage. Refer to *Figure 23*.

p. Loosen large clamp holding door seal to front of outer tub. Refer to *Figure 26*.
q. Slide seal off of front outer tub and remove seal. Refer to *Figure 26*.

NOTE: The ease of installation of the loading door seal can be improved using water or 409 lubricant to work the seal around the circumference of the loading door. Be sure to orientate seal with white arrow in the 12 o'clock position when installing wire clamp ring to front panel. Be careful not to overstretch tension spring.

r. Remove nut, washers and screw holding clamp ring to outer tub front panel. Refer to *Figure 26*.
s. Remove rubber seal from the outer tub front panel and discard.

IMPORTANT: Always replace seal with a new seal. Spray or apply a mixture of diluted laundry detergent to assist in installation of new seal. The "puffy" side of seal should be installed to the inside. For best results, tap clamp ring all around while tightening screw and nut.

NOTE: Install metal clamp ring by placing clamp ring opening at approximately the 10 o'clock position to ensure that no interference is encountered with side panel or the underside of the control cabinet or cabinet top. Tighten the clamp ring screw and nut until a spacing of 1 inch is achieved at the clamp ring opening or until tight.

t. Carefully remove inner basket out through front of washer.

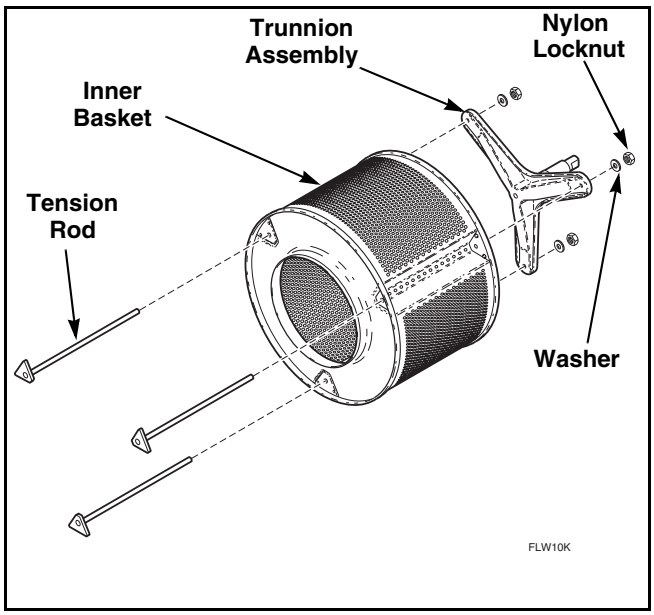

Figure 27

Installing 800749P Trunnion Kit or 800198P Inner Basket Kit –

a. Remove nuts, washers and tension rods holding trunnion to inner basket. Refer to *Figure 27*.
b. If using existing trunnion, clean out old Loctite from pulley bolt threads using a 3/8-24 UNF Left Hand Tap.
c. Dip threads of three new tension rods into lightweight oil.
d. Insert tension rods into inner basket. Refer to *Figure 27*. Position each rod so the rounded corner of triangular head faces the center of inner basket. Refer to *Figure 28*.
e. Position trunnion assembly through rods and onto inner basket.

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WARNING

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- **Disconnect electric power to the washer before servicing.**
- **Never start the washer with any guards/panels removed.**
- **Whenever ground wires are removed during servicing, these ground wires must be reconnected to ensure that the washer is properly grounded.**

W003

f. Attach three washers and three new nylon locknuts onto rods. Leave the nuts loose.

IMPORTANT: Always use new nylon locknuts.

g. Carefully center trunnion on basket and torque nuts to about 50 inch-pounds.
h. Install inner basket/trunnion assembly into washer. Do not bolt down at this time.

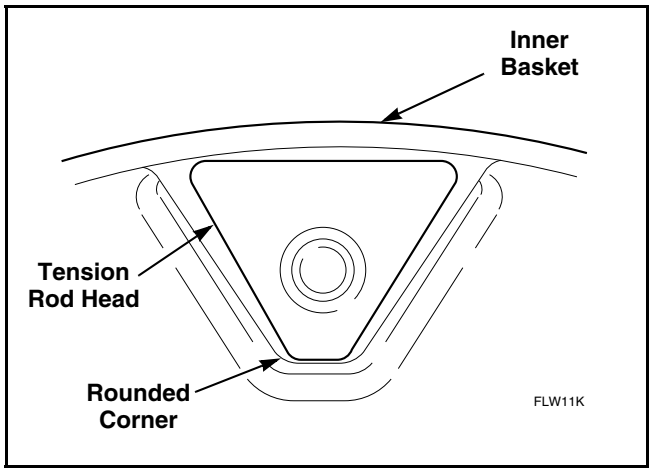

Figure 28

i. Check for concentricity/roundness of assembly. Use a dial indicator to check that concentricity at the inside edge of inner basket lip is a maximum of .05 inch TIR (Total Indicator Runout). Refer to *Figure 29*. If concentricity is not within .05 inch, remove assembly from washer and adjust location of trunnion. Repeat until concentricity is within .05 inch.
j. Remove inner basket/trunnion assembly from washer and evenly torque three nuts to 200 ± 10 inch-pounds.
k. Recheck that concentricity is still within .05 inch.

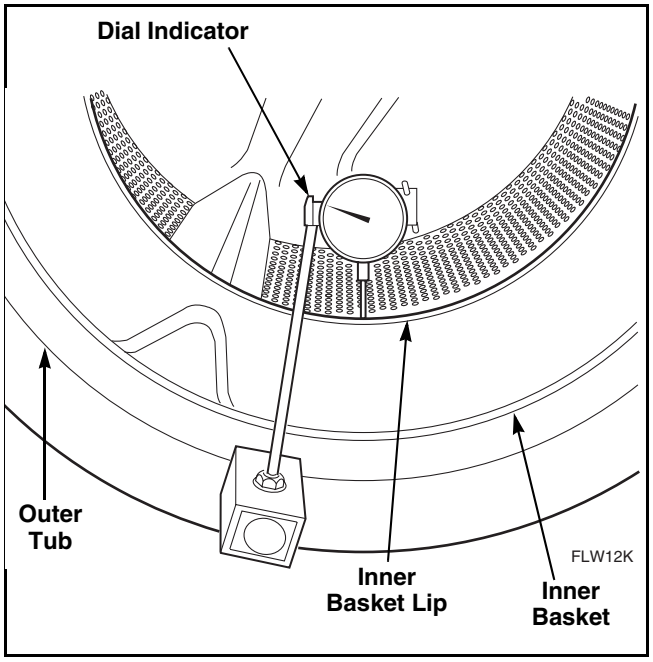

Figure 29

Inner Basket Installation –

a. Apply No. 27604P Anti-Seize Compound to the area of the trunnion shaft that will be contacting the front and rear bearings. Refer to *Figure 30*.
b. Apply a film of grease to area of shaft that will be contacting the bearing housing seal. Refer to *Figure 30*. Make sure seal lips also are packed with grease. Refer to *Figure 30*.

IMPORTANT: When installing inner basket, the following steps must be taken to ensure that the seal is properly orientated:

c. Install inner basket assembly by pushing all the way into outer tub.
d. Install pulley, flat washer, lockwasher and left hand cap screw. Refer to *Figure 19*.

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WARNING

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- **Disconnect electric power to the washer before servicing.**
- **Never start the washer with any guards/panels removed.**
- **Whenever ground wires are removed during servicing, these ground wires must be reconnected to ensure that the washer is properly grounded.**

W003

IMPORTANT: When installing pulley, always use a new cap screw (included in kit) to prevent screw from loosening during operation. Use a thread tap to clean old Loctite out of pulley screw receiving hole before installing new screw. This ensures that inner basket and pulley properly seat.

e. Unscrew left hand thread screw half way.
f. Install pulley bolt tightening fixture between the flat washer and the pulley. Refer to *Figure 31*.
g. Tighten left hand thread screw until washer is against pulley bolt tightening fixture.
h. Loosen screw about one half turn to free fixture.
i. Remove pulley bolt tightening fixture.
j. From front of washer, pull inner basket forward as far as possible. Flat washer should be against pulley.
k. Push inner basket back into outer tub as far as possible.
l. Tighten left hand thread screw. Be careful not to push the trunnion shaft forward while tightening the screw.

NOTE: Torque new left hand thread screw to 240 minimum to 260 maximum inch pounds (27.5 to 29.7 Nm).

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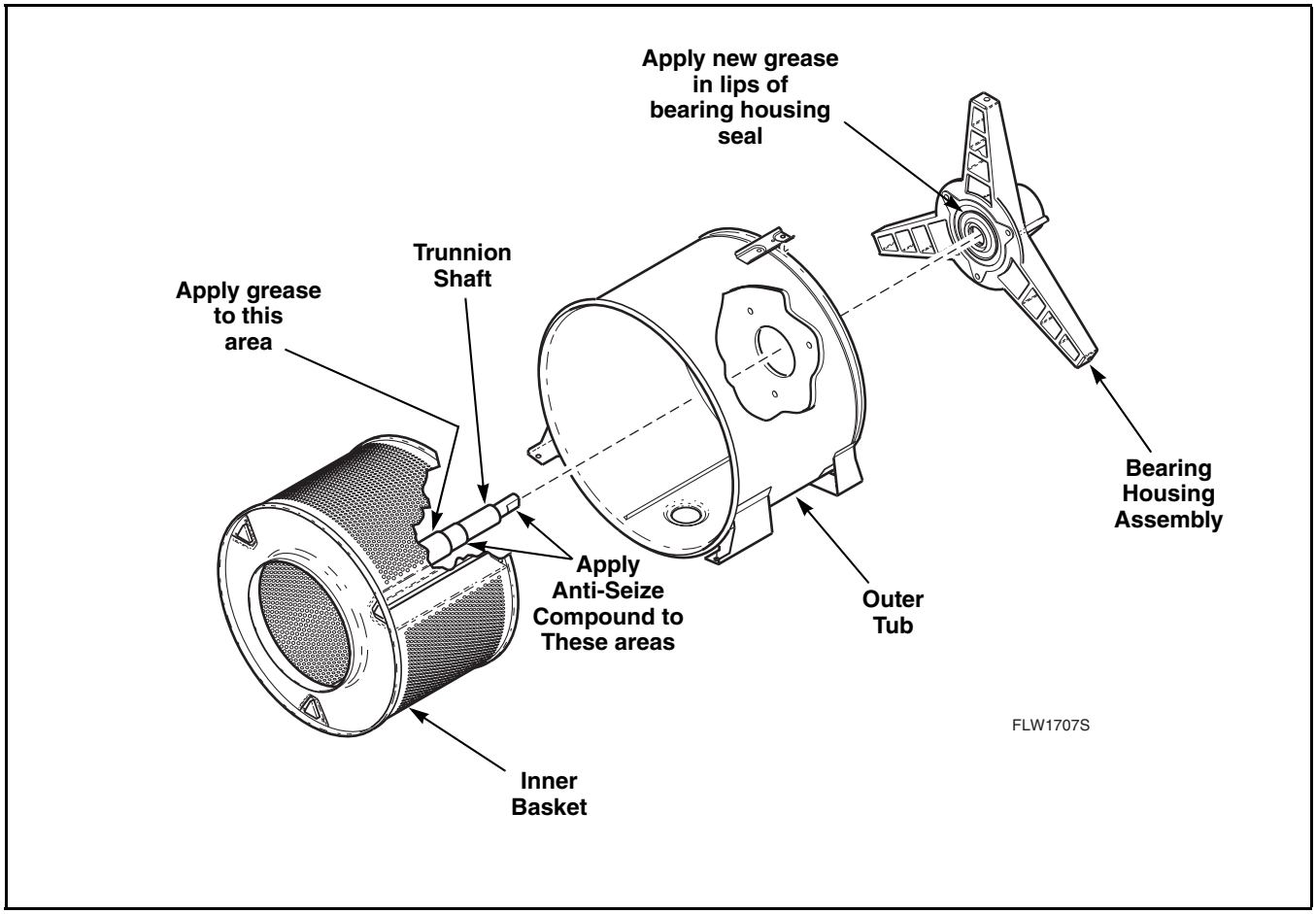

Figure 30

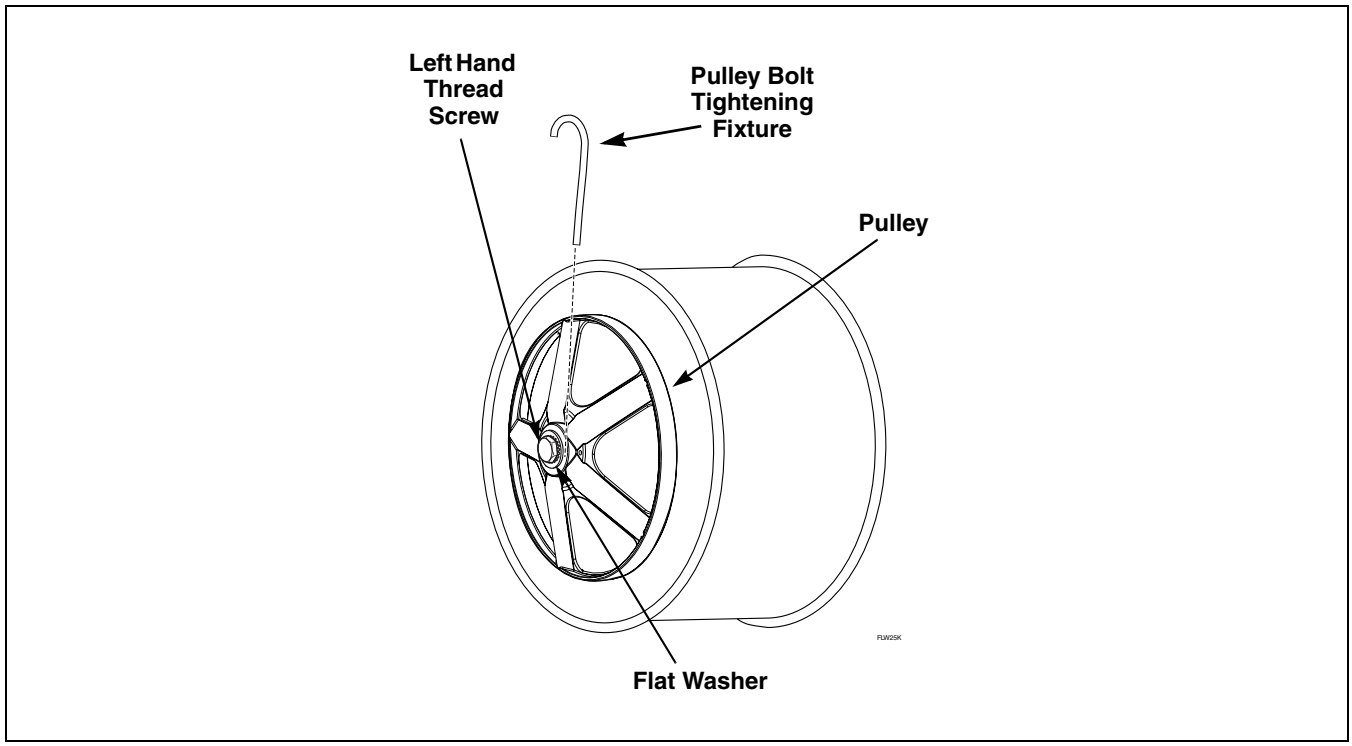

Figure 31

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WARNING

To reduce the risk of electric shock, fire, explosion, serious injury or death:
- **Disconnect electric power to the washer before servicing.**
- **Never start the washer with any guards/panels removed.**
- **Whenever ground wires are removed during servicing, these ground wires must be reconnected to ensure that the washer is properly grounded.**

W003

34. BEARING HOUSING ASSEMBLY

Bearing Housing Removal –

a. While supporting lower access panel, remove two screws from bottom edge of panel and remove panel. Refer to *Figure 15*.

b. Using the special tool, No. 318P4, remove the dispenser drawer. Refer to *Figure 20*.

c. Open loading door. Carefully remove wire clamp ring from groove with a small flat blade screwdriver. Spring is in 6 o'clock position.

NOTE: To avoid damage to spring, use screwdriver on wire clamp ring to the right or left of spring.

d. Grasp loading door seal lip. Refer to *Figure 22*, Step 1.

NOTE: To avoid damage to door seal, DO NOT use pliers or sharp objects to grasp the door seal lip. If lip is damaged, seal will leak.

e. Using a circular motion, pull seal up (*Figure 22*, Step 1), out (*Figure 22*, Step 2) and down (*Figure 22*, Step 3).

f. When seal releases from lip of front panel, pull out and remove the seal. Refer to *Figure 22*, Step 4.

g. While supporting the front panel assembly, remove the two bottom front corner screws. Refer to *Figure 21*. Remove front panel (with loading door attached) away from washer as far as wires permit.

NOTE: Refer to wiring diagram when rewiring door switch.

h. Unplug wire harness from both the door latch switch and from the door switch. Refer to *Figure 23*. Remove clips holding wire harness and door seal hose along top flange of front panel and remove front panel. Refer to *Figure 23*.

NOTE: The large wire clip holds both the wire harnesses and the door seal hose. Refer to *Figure 23*.

i. **Rear Control Washers**

(1) Remove two screws holding cabinet top to front flange of side panels.

(2) If area or space permits, lift cabinet top to a vertical position by hinging it on rear hinges.

j. **Front Control Washers**

(1) Unscrew timer knob from timer shaft (right hand thread), then remove timer knob skirt. Refer to *Figure 11*.

(2) Pull temperature switch knob off shaft.

(3) Remove screws holding control panel to control cabinet. Refer to *Figure 11*. Remove panel.

(4) Remove screws holding cabinet top to control cabinet. Refer to *Figure 11*.

(5) If area or space permits, lift cabinet top to a vertical position.

NOTE: To avoid damage to hinges, be sure to support top with a chain (not included) or equivalent. Refer to *Figure 12*.

(6) Remove cabinet top from washer by removing nuts and carriage bolts holding cabinet top and hinges to control cabinet. Refer to *Figure 12*.

(7) Carefully lift cabinet top off washer and set out of the way to prevent damage.

(8) Remove screws holding control cabinet base to control cabinet. Refer to *Figure 11*.

(9) Remove screws holding control shield (with controls attached) to bottom rear flange of control cabinet. Refer to *Figure 11*.

(10) Remove screws holding motor control board to rear control cabinet. Refer to *Figure 11*.

(11) Remove screws holding control cabinet to top flange of side panels.

(12) Carefully lift control cabinet assembly off washer.

k. Loosen hose clamp and remove dispenser valve-to-door seal hose connection at the dispenser. Refer to *Figure 23*.

IMPORTANT: When installing door seal hose, pull hose tie tight to prevent damage. Refer to *Figure 23*.

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WARNING

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- **Disconnect electric power to the washer before servicing.**
- **Never start the washer with any guards/panels removed.**
- **Whenever ground wires are removed during servicing, these ground wires must be reconnected to ensure that the washer is properly grounded.**

W003

l. Loosen large clamp holding door seal to front of outer tub. Carefully pull seal off front lip of outer tub front panel and remove door seal and hose. Refer to *Figure 23*.

NOTE: Door seal installation can be improved using water or soap solution to work seal around circumference of loading door opening. Be sure to install seal with the tab in the 12 o'clock position.

m. Disconnect ground wire from outer tub front panel. Refer to *Figure 26*.
n. Remove nut, washers and screw holding clamp ring to outer tub front panel. Refer to *Figure 26*.
o. Remove rubber seal from outer tub front panel and discard seal.

IMPORTANT: Always replace seal with a new seal. Spray or apply a mixture of diluted laundry detergent to assist in installation of new seal. The "puffy" side of seal should be installed to the inside. For best results, tap clamp ring all around while tightening screw and nut.

NOTE: Install clamp screw with threads and nut facing downward. Refer to *Figure 26*. Install metal clamp ring by placing clamp ring opening at approximately the 10 o'clock position to ensure no interference is encountered with side panel or the underside of the control cabinet or cabinet top. Tighten screw and nut until a spacing of 1 inch is achieved at the clamp ring opening. Tap clamp ring all around while tightening the screw and nut.

p. Run belt off pulley while slowly turning pulley. Refer to *Figure 25*.
q. Remove belt from motor shaft.
r. Remove cap screw (left hand thread), lockwasher and flat washer holding pulley to inner basket shaft. Refer to *Figure 24*.
s. Remove pulley from shaft.

IMPORTANT: When installing pulley, always use a new cap screw to prevent screw from loosening during operation.

NOTE: When installing new cap screw, apply a thread locking compound to screw threads and torque new cap screw to 240 minimum to 260 maximum inch pounds (27.5 to 29.7 Nm).

t. After installing belt, adjust belt tension per *Paragraph 38*.
u. Carefully remove inner basket out through front of washer.

NOTE: When installing inner basket, apply No. 27604P Anti-Seeze Compound to the area of the trunnion shaft that will be contacting the front and rear bearings.

v. Remove three screws holding bearing housing arms to outer tub.

IMPORTANT: Prior to disassembly, note the position of the pressure hose, hose clips and mounting plate so parts can be reinstalled in the same position. Refer to *Figure 24*.

w. While supporting bearing housing, remove three inner screws holding bearing housing to rear of outer tub. Refer to *Figure 24*.

Bearing Housing Installation –

NOTE: When installing the bearing housing, be sure to route the pressure hose under the right arm and attach hose and pressure hose clip to mounting plate. Refer to *Figure 24*. Then route pressure hose up to the hose mounting plate on the top arm. Refer to *Figure 24*. Make sure there is no slack between these two points. All excess pressure hose slack must be collected between the top hose mounting plate on the beaing housing arm and the pressure hose clip. Refer to *Figure 24*.

IMPORTANT: The three arm bolts should always be tightened first and torqued to 275 inch pounds (31.46 Nm). Then tighten the three inner bolts and torque to 150 inch pounds (17.16 Nm).

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WARNING

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- **Whenever ground wires are removed during servicing, these ground wires must be reconnected to ensure that the washer is properly grounded.**

W003

NOTE: If a bearing failure should occur, a new bearing housing assembly should always be used. The bearings and seal are not serviceable parts. Make sure the new bearing housing seal has lubrication in all grooves before installation. If not, lubricate seal.

a. Apply No. 27604P Anti-Seize Compound to the area of the trunnion shaft that will be contacting the front and rear bearings. Refer to *Figure 30*.
b. Apply a film of grease to area of shaft that will be contacting the bearing housing seal. Refer to *Figure 30*. Make sure seal lips also are packed with grease. Refer to *Figure 30*.

IMPORTANT: When installing inner basket, the following steps must be taken to ensure that the seal is properly orientated:

c. Install inner basket assembly by pushing all the way into outer tub.
d. Install pulley, flat washer, lockwasher and left hand thread screw. Refer to *Figure 24*.

IMPORTANT: When installing pulley, always use a new cap screw (included in kit) to prevent screw from loosening during operation. Use a thread tap to clean old Loctite out of pulley screw receiving hole before installing new screw. This ensures that inner basket and pulley properly seat.

e. Unscrew left hand thread screw half way.
f. Install pulley bolt tightening fixture between the flat washer and the pulley. Refer to *Figure 31*.
g. Tighten left hand thread screw until washer is against pulley bolt tightening fixture.
h. Loosen screw about one half turn to free fixture.
i. Remove pulley bolt tightening fixture.
j. From front of washer, pull inner basket forward as far as possible. Flat washer should be against pulley.
k. Push inner basket back into outer tub as far as possible.
l. Tighten left hand thread screw. Be careful not to push the trunnion shaft forward while tightening the screw.

NOTE: Torque new left hand thread screw to 240 minimum to 260 maximum inch pounds (27.5 to 29.7 Nm).

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Section 7
Adjustments

WARNING

To reduce the risk of electric shock, fire, explosion, serious injury or death:
- **Disconnect electric power to the washer before servicing.**
- **Never start the washer with any guards/panels removed.**
- **Whenever ground wires are removed during servicing, these ground wires must be reconnected to ensure that the washer is properly grounded.**

W003

IMPORTANT: When reference is made to directions (right or left) in this manual, it is from operator's position facing front of washer.

35. CABINET LEVELING LEGS

a. Place washer in position on a clean, firm and reasonably level floor. Installing the washer on any type of carpeting is not recommended.

b. Loosen locknuts and adjust the leveling legs until the washer does not rock. Refer to *Figure 32*.

NOTE: Level must rest on raised portion of top panel. Refer to *Figure 32*.

c. Tighten the locknuts securely against the washer base. If the locknuts are not tight, washer will move out of position during operation.

CAUTION

DO NOT slide washer across floor if the leveling legs have been extended, as legs and base could become damaged.

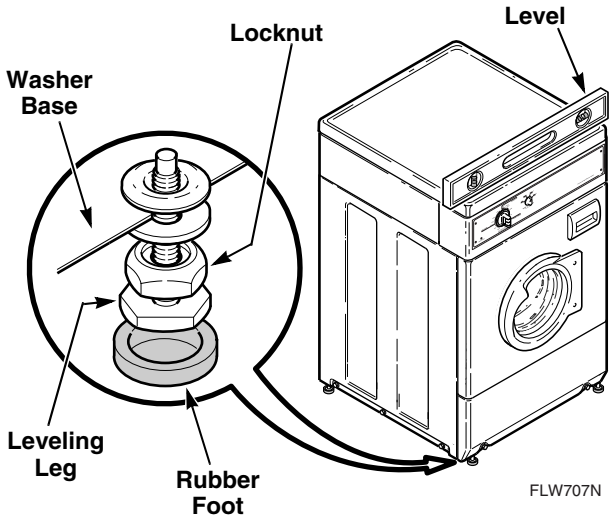
W248

CAUTION

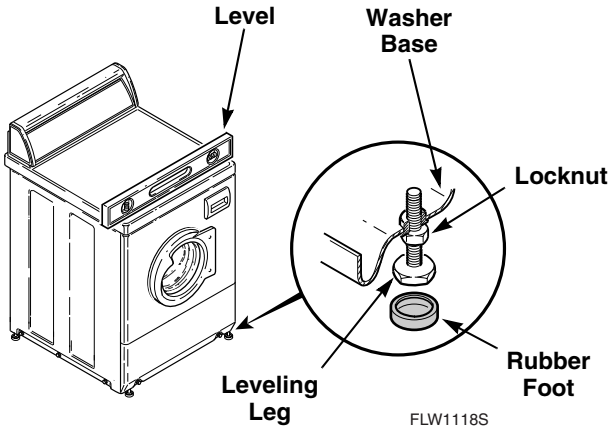
Use of the dispenser drawer or washer door as a handle in the transportation of the washer may cause damage to the dispenser or door.

W185

d. Remove rubber feet from accessories bag and place on all four leveling legs. Refer to *Figure 32*.



FRONT CONTROL WASHERS



REAR CONTROL WASHERS

Figure 32

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WARNING

To reduce the risk of electric shock, fire, explosion, serious injury or death:
- **Disconnect electric power to the washer before servicing.**
- **Never start the washer with any guards/panels removed.**
- **Whenever ground wires are removed during servicing, these ground wires must be reconnected to ensure that the washer is properly grounded.**

W003

36. LOADING DOOR

a. Open loading door.

b. Remove door bezel to gain access to nuts. Refer to *Figure 33*.

c. The loading door can be adjusted up or down somewhat by loosening screws holding door to hinge, then raise or lower door before retightening screws. Refer to *Figure 33*.

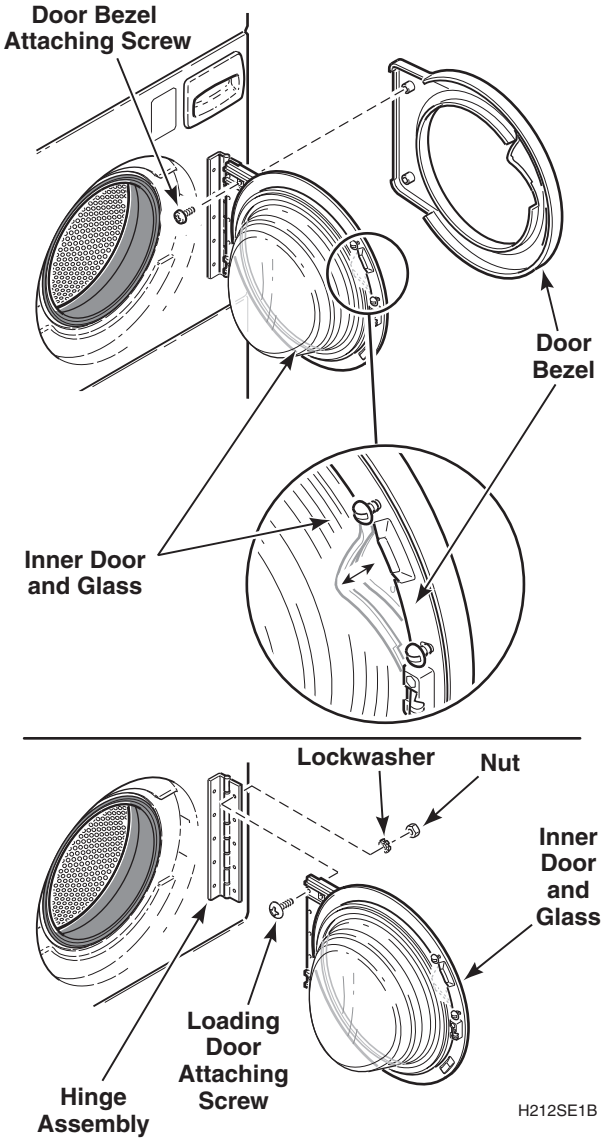

Figure 33

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WARNING

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- **Disconnect electric power to the washer before servicing.**
- **Never start the washer with any guards/panels removed.**
- **Whenever ground wires are removed during servicing, these ground wires must be reconnected to ensure that the washer is properly grounded.**

W003

37. DOOR CATCH

NOTE: When repairing a broken or inoperative No. 685430 Door Catch, proceed as follows:

a. Remove door bezel. Refer to *Figure 33*
b. Remove two screws and nuts holding door catch to door and remove door catch.
c. Install new door catch and tighten screws and nuts to the point of being snug.
d. Adjust door catch so the outside edge is aligned with the edge of the latch. Refer to *Figure 34*.
e. Visually check that the door catch properly engages the funnel of the door latch/switch assembly. Refer to *Figure 34*.
f. Recheck the alignment in Step "d". Adjust if needed.
g. Torque the two nuts to approximately 30 inch pounds (3.4 Nm).
h. Reinstall door bezel.

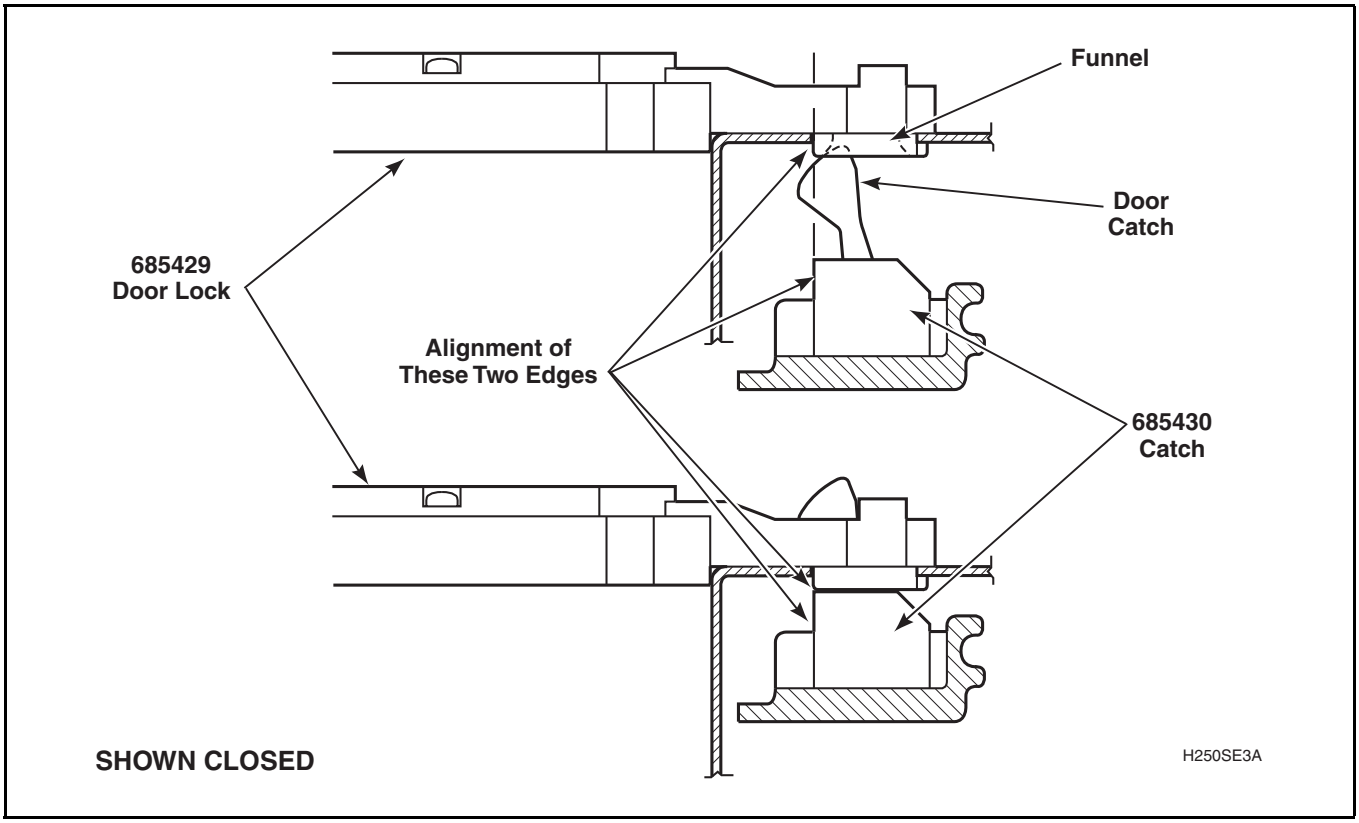

Figure 34

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WARNING

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- **Disconnect electric power to the washer before servicing.**
- **Never start the washer with any guards/panels removed.**
- **Whenever ground wires are removed during servicing, these ground wires must be reconnected to ensure that the washer is properly grounded.**

W003

38. MOTOR BELT

NOTE: Belt adjustment procedures are done through front of washer, however, as an option, washer can be moved from its location and belt adjustment can be done through lower access panel opening at rear of washer.

a. While supporting lower front access panel, remove two screws from bottom edge of access panel and remove panel. Refer to *Figure 15*.
b. Run belt off cylinder pulley while slowly turning pulley. Refer to *Figure 35*.
c. Remove belt from motor shaft.

NOTE: When installing belt, adjust belt tension as follows:

d. Working through the lower front access door opening, place a locking pliers on the metal rod and loosen the two adjusting bolts. Refer to *Figure 35*. Repeat procedure to loosen the two pivot bolts. Refer to *Figure 35*.
e. Pull down on motor to increase belt tension. Use a Burroughs belt gauge to obtain proper tension. Proper belt tension is obtained when belt can be deflected approximately 1/4 inch (6.35 mm) from normal position when moderate pressure 50 to 60 pounds (22.68 to 27.22 Kg) is applied to a point midway between pulleys. Refer to *Figure 35*.
f. After proper belt tension has been obtained, tighten belt adjusting bolts firmly, then tighten pivot bolts. Refer to *Figure 35*.

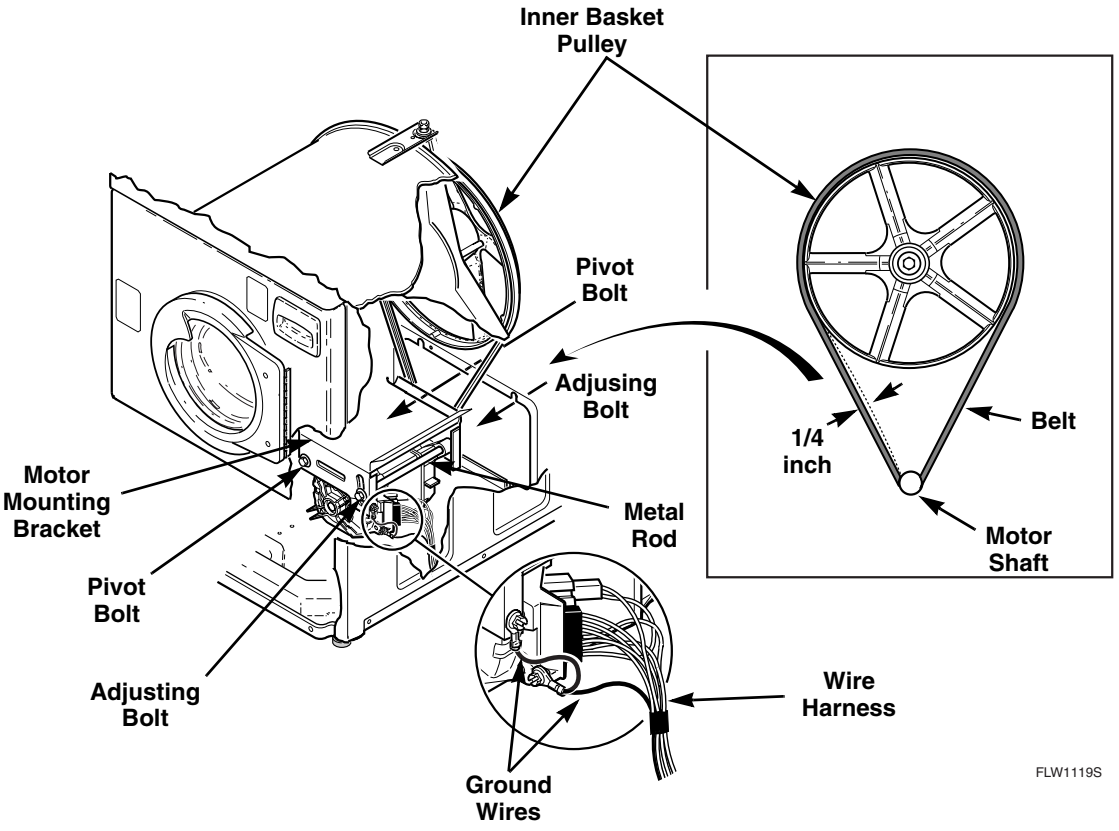

Figure 35

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